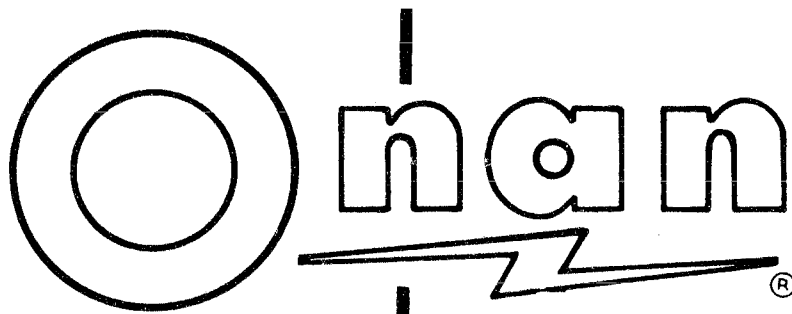


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has gaps in its page
numbers, or doesn't
have any numbers.
We have chosen to
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numbering in the
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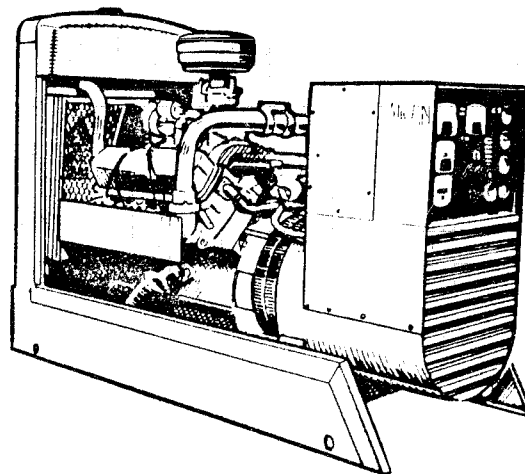


PARTS CATALOG

SERIES

KR

**ELECTRIC GENERATING SETS
BEGIN SPEC T**



A1

FORM NUMBER

957-0220

Printed in U.S.A.

ISSUE DATE

9-79

(BEGIN SPEC T)

INSTRUCTIONS FOR ORDERING REPAIR PARTS

ONAN PARTS

All parts in this list are Onan parts. For parts or service, contact the dealer from whom you purchased this equipment or your nearest authorized service station. To avoid errors or delay in filling your order, please refer to the Onan nameplate and give the complete MODEL, SPECIFICATION and SERIAL number.

Onan ELECTRIC-GEN SET			
MODEL <input style="width: 80%;" type="text"/>			
SERIAL NO. <input style="width: 80%;" type="text"/>			
IMPORTANT - ALWAYS GIVE ABOVE NOS. WHEN ORDERING PARTS			
CONTINUOUS <input style="width: 40%;" type="text"/>		RATING <input style="width: 40%;" type="text"/>	
HERTZ-60 RPM - 1800			
3 PHASE		1 PHASE	
KW <input style="width: 20%;" type="text"/>	KVA <input style="width: 20%;" type="text"/>	KW <input style="width: 20%;" type="text"/>	KVA <input style="width: 20%;" type="text"/>
VOLTS 120/208 127/220 139/210 120/240 240/416			
AMPS <input style="width: 20%;" type="text"/> <input style="width: 20%;" type="text"/> <input style="width: 20%;" type="text"/> <input style="width: 20%;" type="text"/>			
VOLTS 254/440 277/480 347/600 120/240			
AMPS <input style="width: 20%;" type="text"/> <input style="width: 20%;" type="text"/> <input style="width: 20%;" type="text"/> <input style="width: 20%;" type="text"/>			
BAT. <input style="width: 20%;" type="text"/> VOLTS			
MANUFACTURED BY ONAN DIV. OF ONAN CORPORATION MINNEAPOLIS, MINN. 55432, U.S.A. FOR ELECT. EQUIPMENT ONLY			

INTERNATIONAL HARVESTER PARTS

All International Harvester parts must be ordered from the International Harvester Company, Chicago, Illinois or the nearest International Harvester Construction Equipment distributor or dealer.

Refer to the International Harvester nameplate. When ordering parts or requesting service information supply all information stated on engine nameplate and engine serial number which is stamped on front of cylinder head.

MADE IN UNITED STATES OF AMERICA BY	
INTERNATIONAL HARVESTER CO. CHICAGO, ILLINOIS	
MODEL <input style="width: 90%;" type="text"/>	
SERIAL NO. <input style="width: 90%;" type="text"/>	
MAX. IDLE SPEED <input style="width: 80%;" type="text"/>	FULL LOAD SPEED <input style="width: 80%;" type="text"/>
DO NOT OVERLOAD	

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This catalog applies to the standard Onan KR Series units as listed below. These units are powered by an International Harvester engine (see International Harvester's Manual). Engine parts modified or added by Onan will be in this list and have Onan part numbers. These supersede similar parts listed in the International Harvester manual.

Onan parts are arranged in groups of related items and are identified by a reference. All parts illustrations are typical. Using the Model and Spec No. from the Onan nameplate, select parts that apply to your set MODEL and SPEC NO. This parts represents parts that differ between models. Unless otherwise mentioned, parts are interchangeable. Right and left sides are determined by facing the front end of the engine.

GENERATING SET DATA TABLE

MODEL & SPEC NO.*	ELECTRICAL DATA			
	WATTS	HERTZ	PHASE	WIRE
70.0KR-515R/	70,000	50	**	12
70.0KR-15R/	70,000	60	**	12
85.0KR-15R/	85,000	60	**	12
85.0KR-9XR/	85,000	60	3	4
Pennsylvania Approved Models	See Special Parts List Following the Standard Parts List.			

- * - The Specification Letter advances (A to B, B to C, etc.) with manufacturing changes.
- ** - These sets are reconnectable; refer to wiring diagram inside Control Box Cover.

REPLACEMENT ENGINE

100-0855

1

★ Engine, Replacement - International Harvester Company Model UV-549.

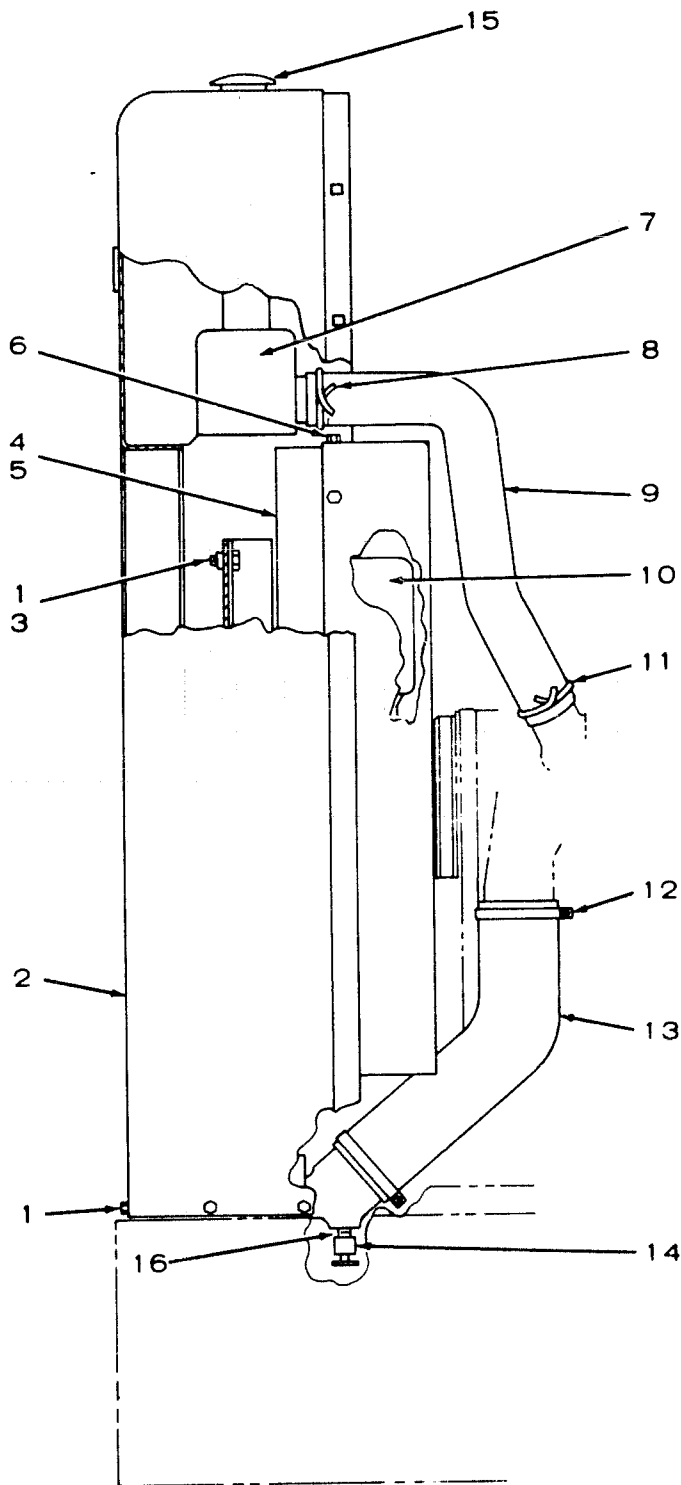
GENERAL DESCRIPTION:

Includes - Complete Cylinder Block, Oil Pan, Water Pump, Oil Filter, Governor, Exhaust Manifolds and Engine Mounts.

Excludes - Carburetor, Fuel Pump, Air Cleaner, Fuel Filter, Starter & Solenoid, Charge Generator, Regulator & Wire Harness, Ignition Coil, Distributor, Spark Plug Leads, Oil Pressure & Water Temperature Gauge Senders, Oil Pressure Switch, High Water Temperature Cut Off Switch, Anti-Dieseling Control, Radiator, Fan Blades & Belt, Exhaust Header, Muffler and Exhaust Tube.

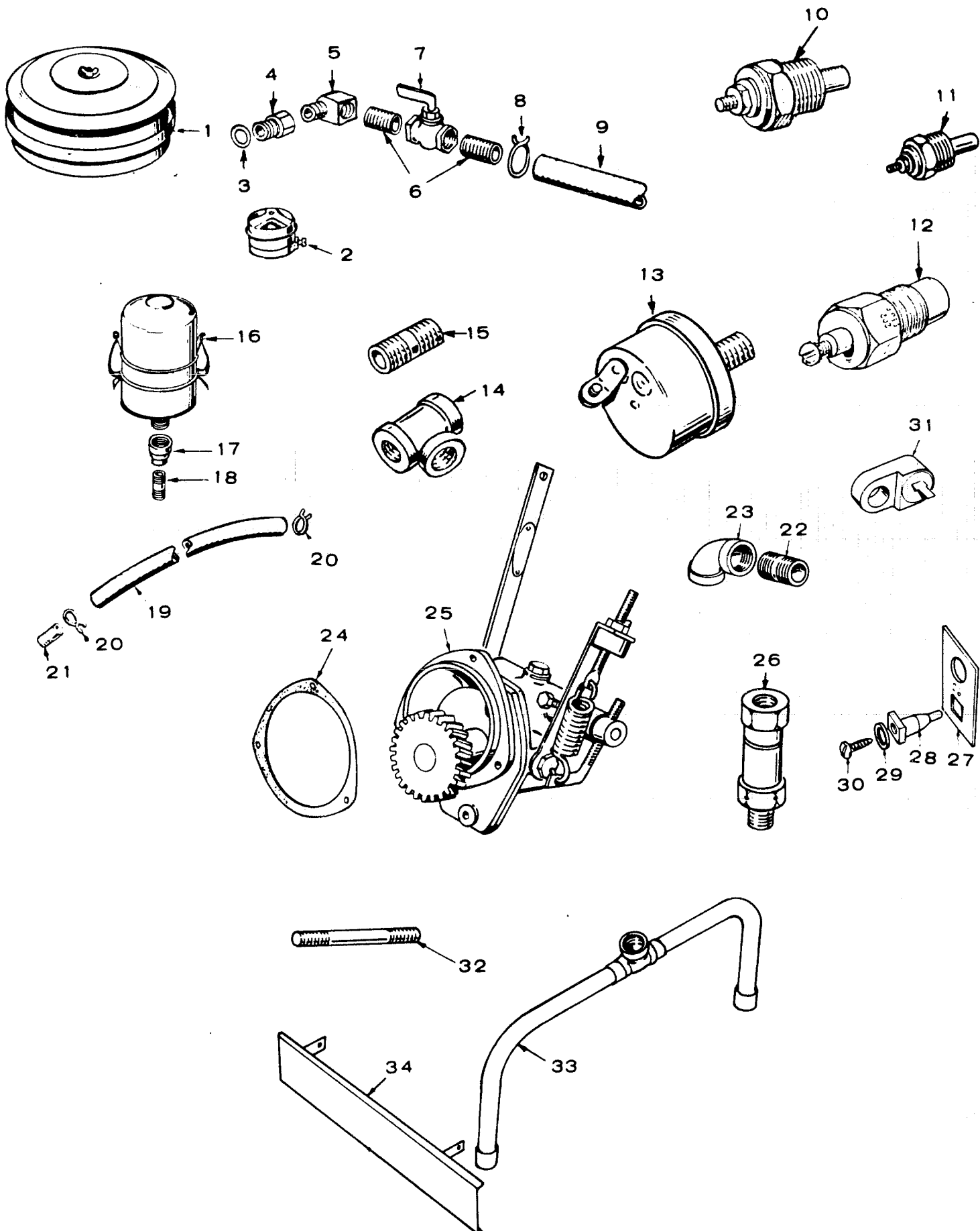
★ - Standard generator set, for all other models refer to factory.

COOLING SYSTEM



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	821-0014	16	Screw, Cap - Locking Head (5/16-18 x 1/2")
2	405-1153	1	Panel, Front Housing
3	870-0114	8	Nut, Retainer (5/16-18)
4	130-0433	1	Guard, Fan (R/H)
5	130-0434	1	Guard, Fan (L/H)
6	821-0010	10	Screw, Cap - Locking Head (1/4-20 x 1/2")
7	130-0429	1	Radiator (Includes Cap)
8	503-0311	2	Clamp, Hose
9	503-0332	2	Hose, Radiator - Upper
10	130-0428	1	Fan Blade
11	503-0365	2	Clamp, Hose
12	503-0354	2	Clamp, Hose
13	185-1005	1	Hose, Radiator - Lower
14	504-0028	1	Cock, Drain
15	130-0449	1	Cap, Radiator
16	505-0019	1	Bushing, Drain Cock

MISCELLANEOUS ENGINE PARTS



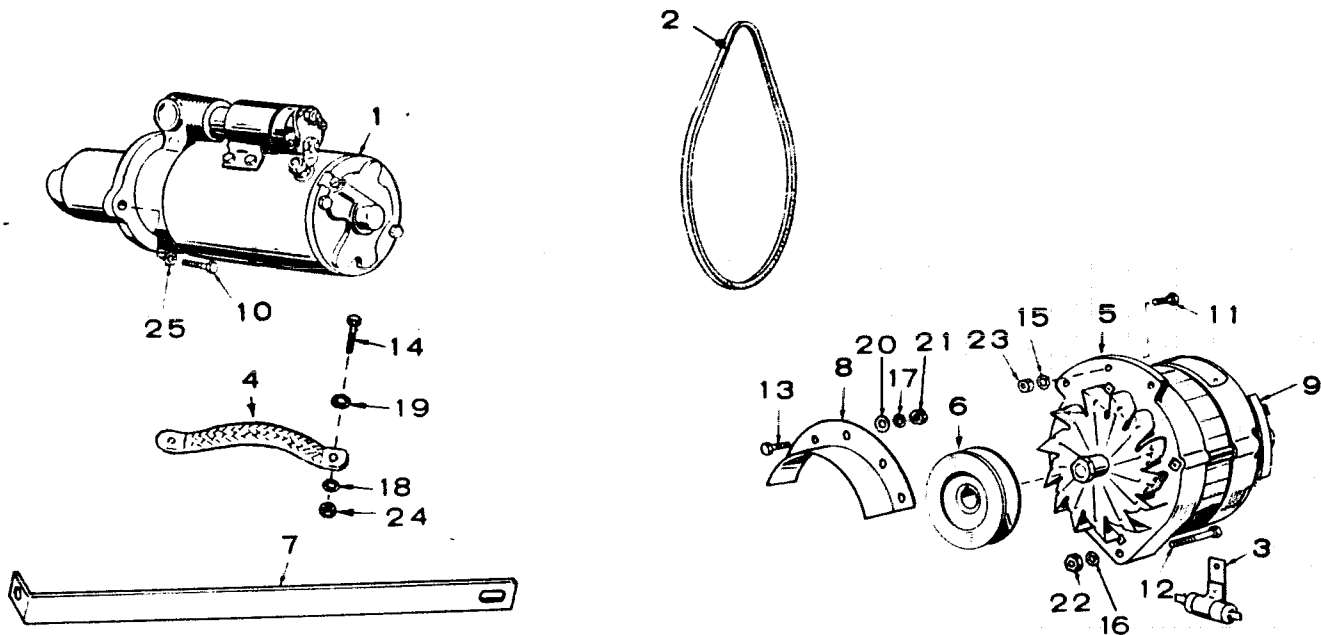
MISCELLANEOUS ENGINE PARTS

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	140-0524	1	Cleaner, Air
2	140-0525	1	Adapter, Air Cleaner
3	102-0034	1	Gasket, Oil Drain Adapter
4	102-0033	1	Adapter, Oil Drain
5	502-0133	1	Elbow, Oil Drain
6	505-0100	2	Nipple, Oil Drain
7	504-0011	1	Valve, Oil Drain Shut Off
8	503-0197	1	Clamp, Oil Drain Hose
9	503-0098	1	Hose, Oil Drain
10	193-0244	1	Sender, Oil Pressure
11	193-0246	1	Sender, Water Temperature
12	309-0178	1	Switch, Water Temperature
13	309-0169	1	Switch, Oil Pressure
14	505-0059	1	Tee, Pipe
15	505-0104	1	Nipple, Close
16	140-0518	1	Cleaner, Crankcase Breather
17	505-0369	1	Coupling, Reducer
18	505-0099	1	Nipple, Close
19	503-0445	1	Hose, Breather
20	503-0131	2	Clamp, Breather Hose
21	505-0010	1	Nipple, Half - Breather Hose Adapter

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
22	505-0099	1	Nipple, Close - Breather Hose Adapter
23	505-0038	1	Elbow, Breather Hose Adapter
24	151-0387	1	Gasket, Governor Flange
25	151-0371	1	*Governor Assembly (International Harvester No. 678045C91)
26	123-0960	1	Vent, Crankcase
27	332-1281	1	Bracket, Terminal Mounting
28	870-0196	1	Nut, Insulator
29	508-0015	1	Washer, Insulator
30	809-0035	1	Screw, Sheet Metal - Roundhead (#8 x 3/4")
31	309-0269	1	Switch, Low Engine Temperature
32	520-0599	2	Stud, Exhaust Elbow
33	155-0612	1	Header, Exhaust
34	133-0157	2	Shield, Exhaust Manifold Heat

* - Order Parts or Components for this Governor (International Harvester #678045C91) from the International Harvester Company, 401 North Michigan Avenue, Chicago, Illinois 60611

STARTER AND ALTERNATOR



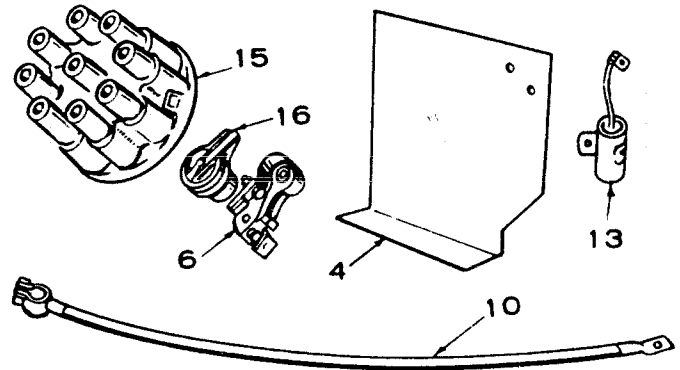
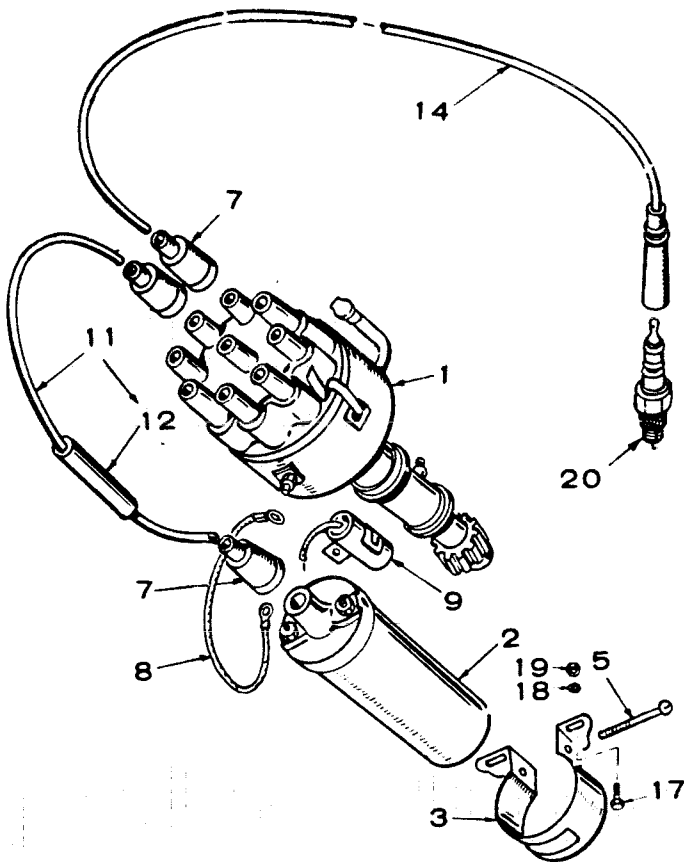
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	191-0486	1	*Motor, Starting (12 Volt) (Delco Remy #1113167-H)
2	511-0025	1	Belt, Alternator Drive
3	312-0201	1	Condenser - Charge Alternator
4	337-0090	2	Strap, Ground (8-7/16")
5	191-0665	1	**Alternator, Charge (Includes Regulator) - Motorola #70D44039B
6	191-0649	1	Pulley, Alternator
7	191-0678	1	Brace, Alternator Mounting
8	191-0725	1	Guard, Alternator Belt
9	191-0732	1	Regulator, Alternator (Part of Alternator)
SCREW, CAP, HEX HEAD			
10	800-0051	2	Starter Motor Mounting (3/8-16 x 1-1/4")
11	800-0050	3	Alternator Mounting (3/8-16 x 1-1/4")
12	800-0095	1	Alternator Mounting (1/2-13 x 2-1/4")
13	800-0025	6	Alternator Guard Mounting (5/16-18 x 3/4")
14	800-0091	1	Ground Strap Mounting (1/2-13 x 1-1/4")

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
WASHER, LOCK-SPRING			
15	850-0050	3	Alternator Mounting (3/8")
16	850-0060	1	Alternator Mounting (1/2")
17	850-0045	6	Alternator Guard Mounting (5/16")
18	856-0013	1	Ground Strap Mounting (1/2") EIT
19	850-0060	1	Ground Strap Mounting (1/2")
20	526-0115	6	Washer, Flat - Alternator Guard Mounting (11/32" ID x 11/16" OD x 1/16" Thk)
NUT, HEX			
21	862-0015	6	Alternator Guard Mounting (5/16-18)
22	862-0005	1	Alternator Mounting (1/2-13")
23	862-0003	3	Alternator Mounting (3/8-16")
24	862-0016	1	Ground Strap Mounting (1/2-13")
25	856-0010	2	Washer, Shakeproof - Starter Motor Mounting (3/8")

* - For components contact your nearest Delco Remy dealer or Delco Remy Div. of General Motors Corp., Anderson, Indiana 46011.

** - For components contact your nearest Motorola dealer or Motorola Automotive Products Inc., 9401 W. Grand Avenue, Franklin Park, Illinois 60131.

IGNITION SYSTEM

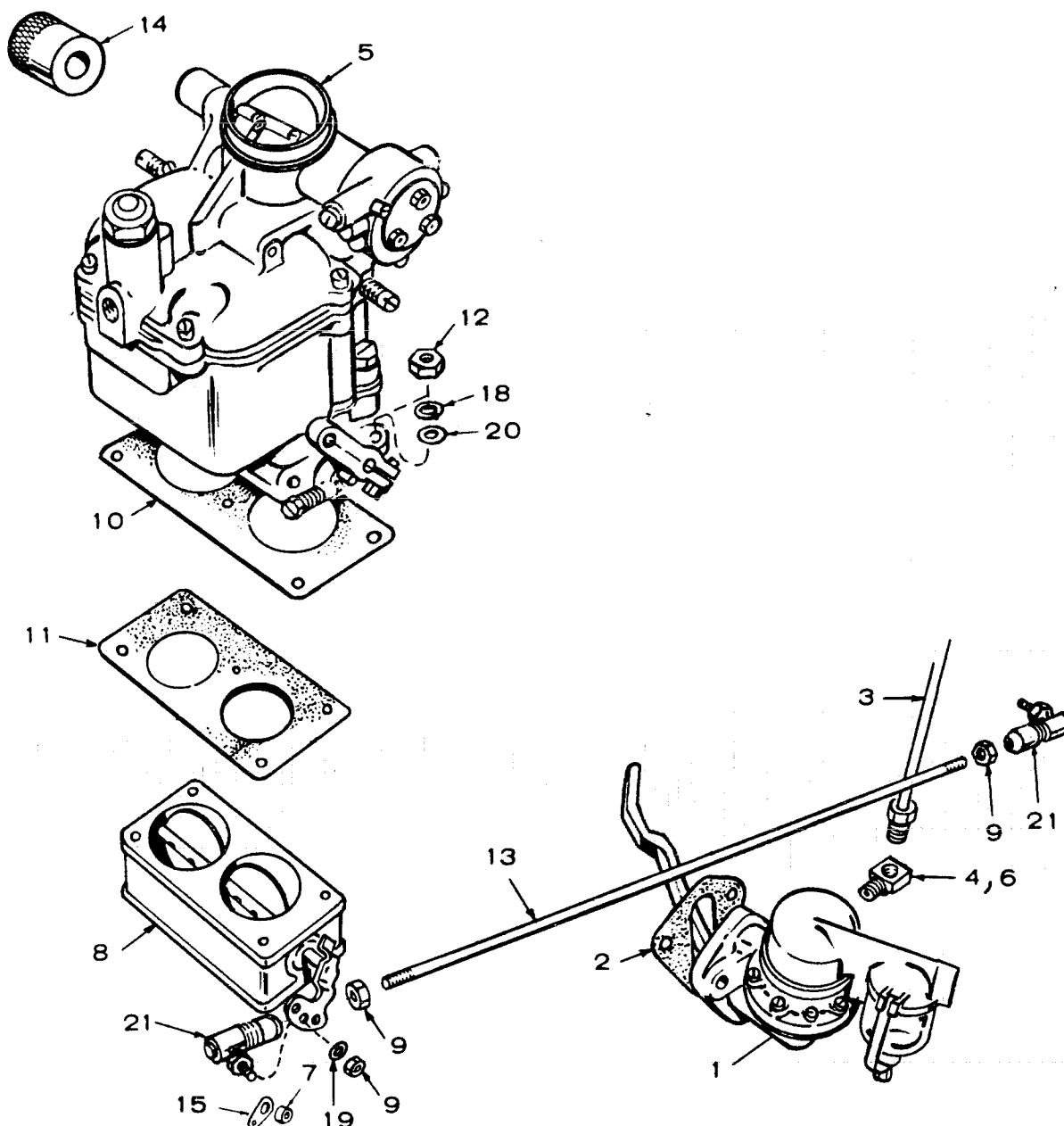


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	166-0282	1	*Distributor Assembly (Delco Remy #1110625)
2	166-0278	1	Coil, Ignition (12 Volt)
3	166-0279	1	Bracket, Coil Mounting
4	133-0158	1	Shield, Ignition Coil Heat
5	166-0286	1	Screw, Oil Bracket
6	166-0321	1	Point Set, Breaker
7	160-0558	10	Nipple, Rubber (9) Distributor, (1) Ignition Coil
8	336-0332	1	Lead, Ignition Coil
9	312-0058	1	Condenser, Ignition Coil (0.1 Mfd)
10	CABLE, BATTERY		
	416-0643	1	28-1/4" Long
	416-0021	1	20-1/2" Long
11	167-1528	1	Cable, Distributor (Includes Suppressor)
12	314-0006	1	Suppressor, Distributor
13	166-0320	1	Condenser, Distributor

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
14	CABLE, SPARK PLUG		
	167-1332	1	Cylinder No. 1
	167-1333	1	Cylinder No. 2
	167-1334	1	Cylinder No. 3
	167-1337	1	Cylinder No. 4
	167-1335	1	Cylinder No. 5
	167-1336	1	Cylinder No. 6
	167-1338	1	Cylinder No. 7
	167-1339	1	Cylinder No. 8
15	166-0318	1	Cap, Distributor
16	166-0319	1	Rotor, Distributor
17	800-0026	2	Screw, Cap - Hex Head (5/16-18 x 3/4")
18	850-0045	2	Washer, Lock - Spring (5/16")
19	862-0015	2	Nut, Hex
20	167-0127	8	Plug, Spark

* - For components not listed, contact your nearest Delco Remy dealer or Delco Remy Division of General Motors Corp., Anderson, Indiana 46011.

FUEL SYSTEM.



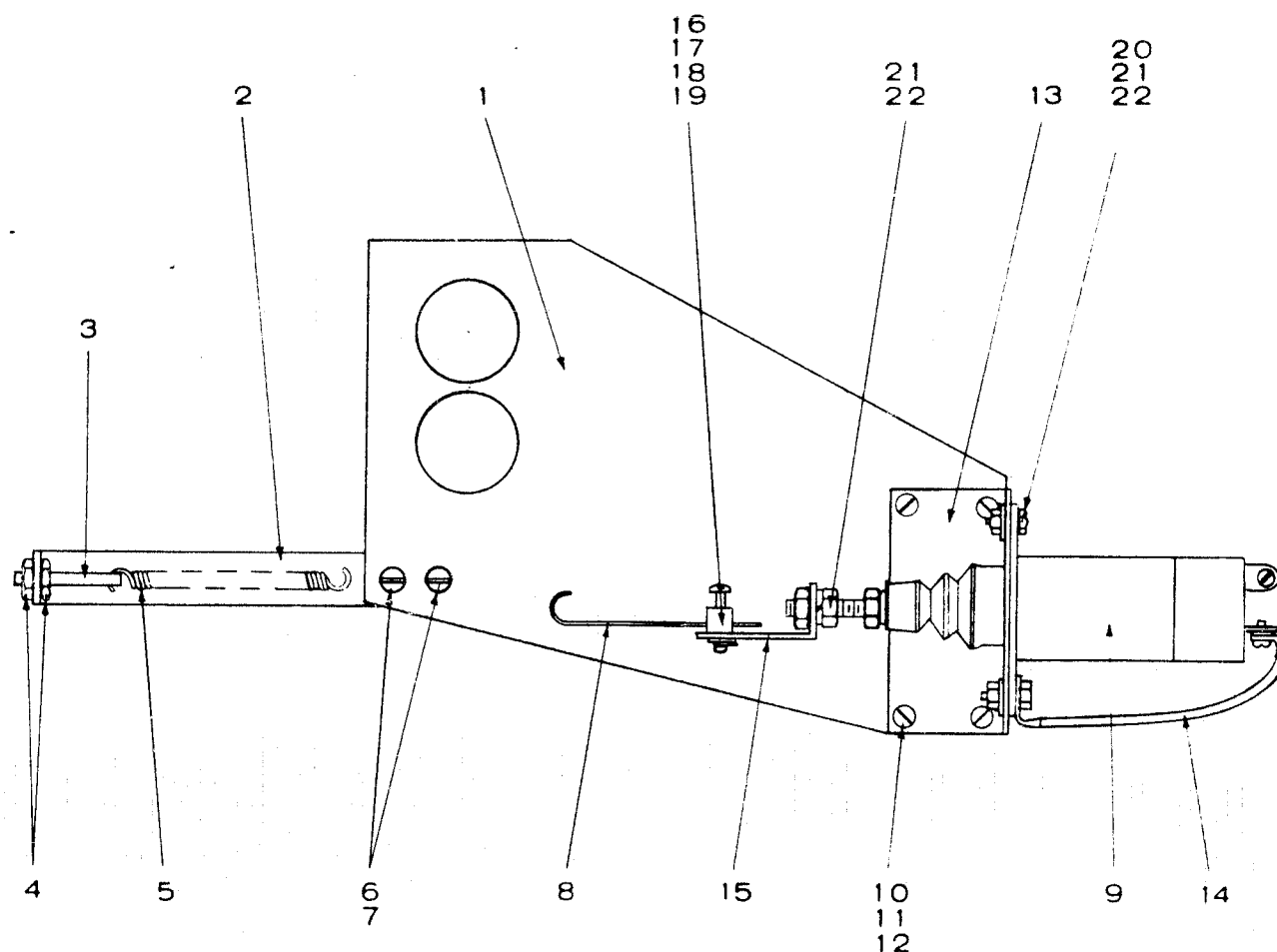
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	149-0730	1	Pump, Fuel (Includes Mounting Gasket)
2	149-0736	1	Gasket, Fuel Pump Mounting
3	159-0685	1	Line, Fuel Pump to Carburetor
4	502-0004	1	Elbow, Inverted Male - Fuel Pump Outlet
5	141-0635	1	*Carburetor (Includes Mounting Gaskets) (ZENITH #12411A)
6	502-0004	1	Elbow, Male - Carburetor Inlet
7	150-0302	1	Bushing, Throttle Spring
8	145-0410	1	Body Assembly, Throttle (Includes Parts Marked †)
9	115-0025	4	†Nut, Hex (1/4-28) (2) Governor Control Stud (2) Ball Joint
10	145-0189	1	Gasket, Carburetor Mounting
11	145-0185	1	Gasket, Throttle Body Mounting
12	110-0445	4	Nut, Hex - Carburetor Mounting (5/16-24)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
13	520-0517	1	†Stud, Governor Control
14	141-0372	1	Knob, Choke
15	145-0414	1	Link, Throttle Spring
16	813-0148	1	Screw, Machine - Roundhead (1/4-28 x 1/2")
17	526-0018	2	Washer, Flat (17/64" ID x 5/8" OD x 1/16" Thk)
18	850-0045	4	Washer, Lock - Spring - Carburetor Mounting (5/16")
19	850-0040	2	†Washer, Lock - Spring - Ball Joint (1/4")
20	526-0115	4	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)
21	150-0638	2	†Joint, Ball
	141-0640	1	Repair Kit, Carburetor
	141-0641	1	Gasket Kit, Carburetor

† - Parts Included in 145-0410 Throttle Body Assembly.

* - For Components contact your nearest ZENITH Carburetor Dealer or ZENITH Carburetor Division, The Bendix Corporation, 696 Hart Avenue, Detroit, Michigan.

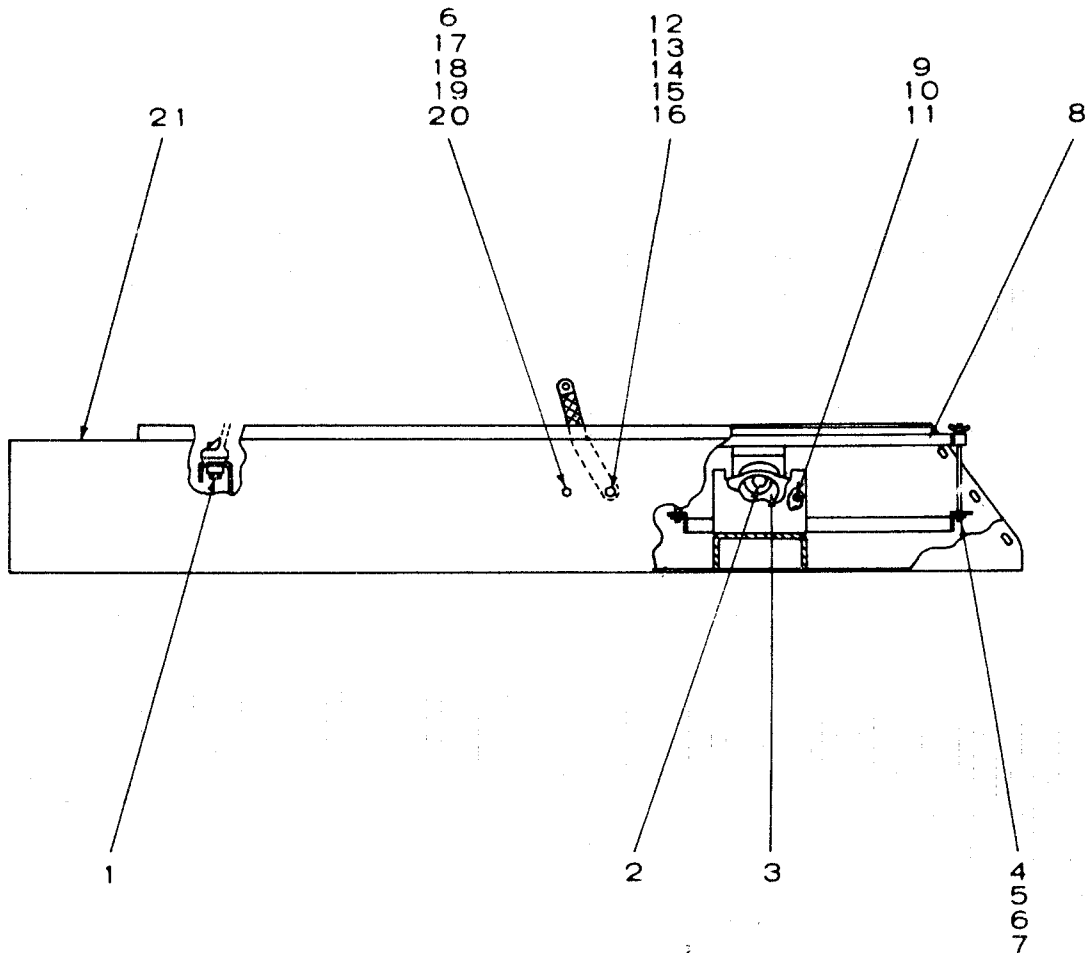
ANTI DIESELING SYSTEM



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	145-0186	1	Bracket, Anti Dieseling Mounting
2	145-0187	1	Bracket, Throttle Spring
3	150-0096	1	Stud, Governor Adjusting
4	870-0053	2	Nut, Hex (#10-32)
5	145-0158	1	Spring, Throttle
6	813-0100	2	Screw, Machine - Roundhead (#10-32 x 1/2")
7	870-0131	2	Nut, Hex W/ET (#10-32)
8	145-0436	1	Link, Solenoid
9	307-1356	1	Solenoid, Anti Dieseling
10	812-0079	4	Screw, Machine - Roundhead (#8-32 x 1/2")
11	850-0025	4	Washer, Lock - Spring (#8)

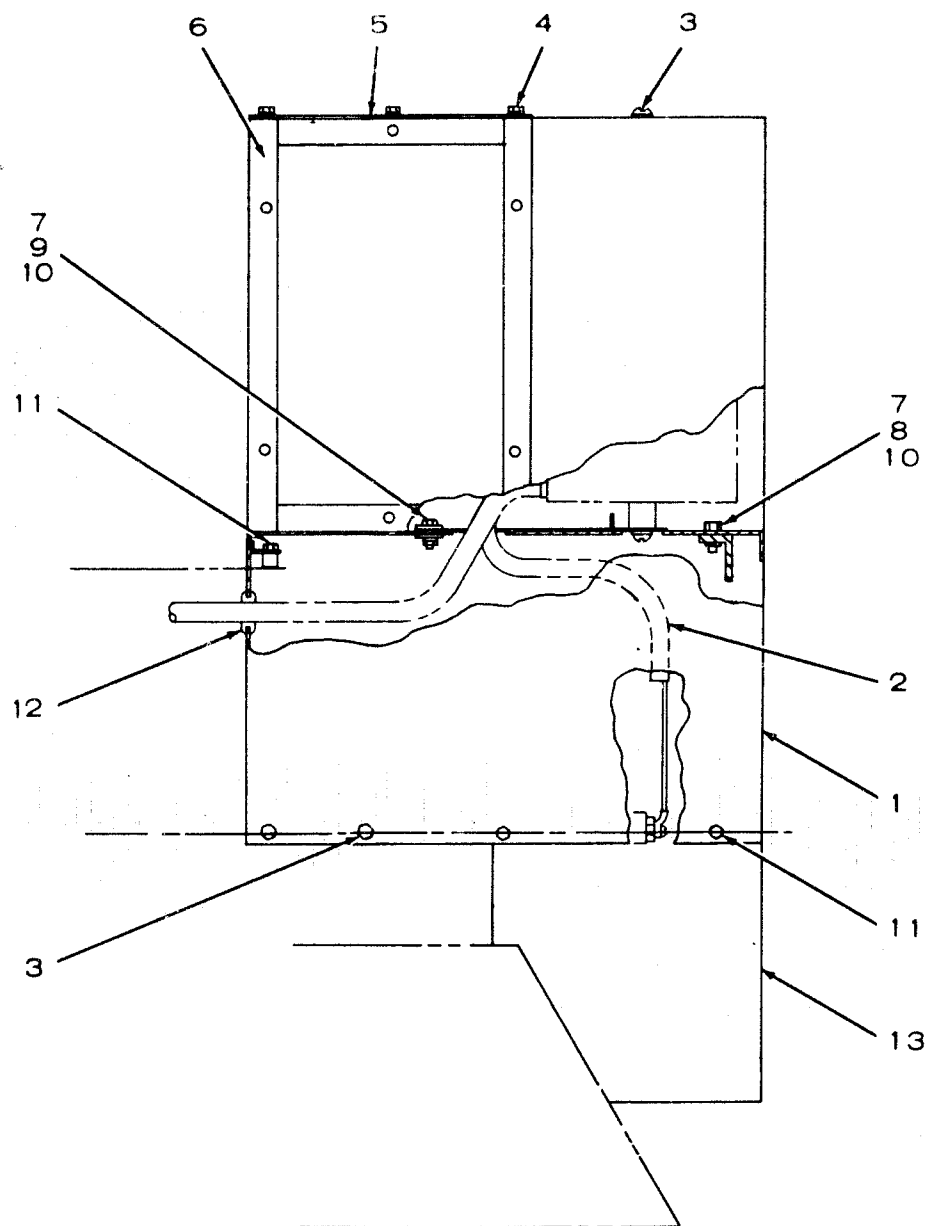
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
12	860-0008	4	Nut, Hex (#8-32)
13	307-1323	1	Bracket, Solenoid Mounting
14	336-0332	1	Lead, Ground
15	307-1330	1	Bracket, Solenoid
16	152-0155	1	Swivel, Choke Lever
17	526-0006	2	Washer, Flat (15/64" ID x 1/2" OD x 3/64" Thk)
18	516-0059	1	Pin, Cotter
19	815-0104	1	Screw, Machine - Fillister (#8-32 x 5/16")
20	800-0003	2	Screw, Cap - Hex Head (1/4-20 x 1/2")
21	850-0060	3	Washer, Lock - Spring (1/4")
22	862-0001	2	Nut, Hex (1/4-20)

CHASSIS



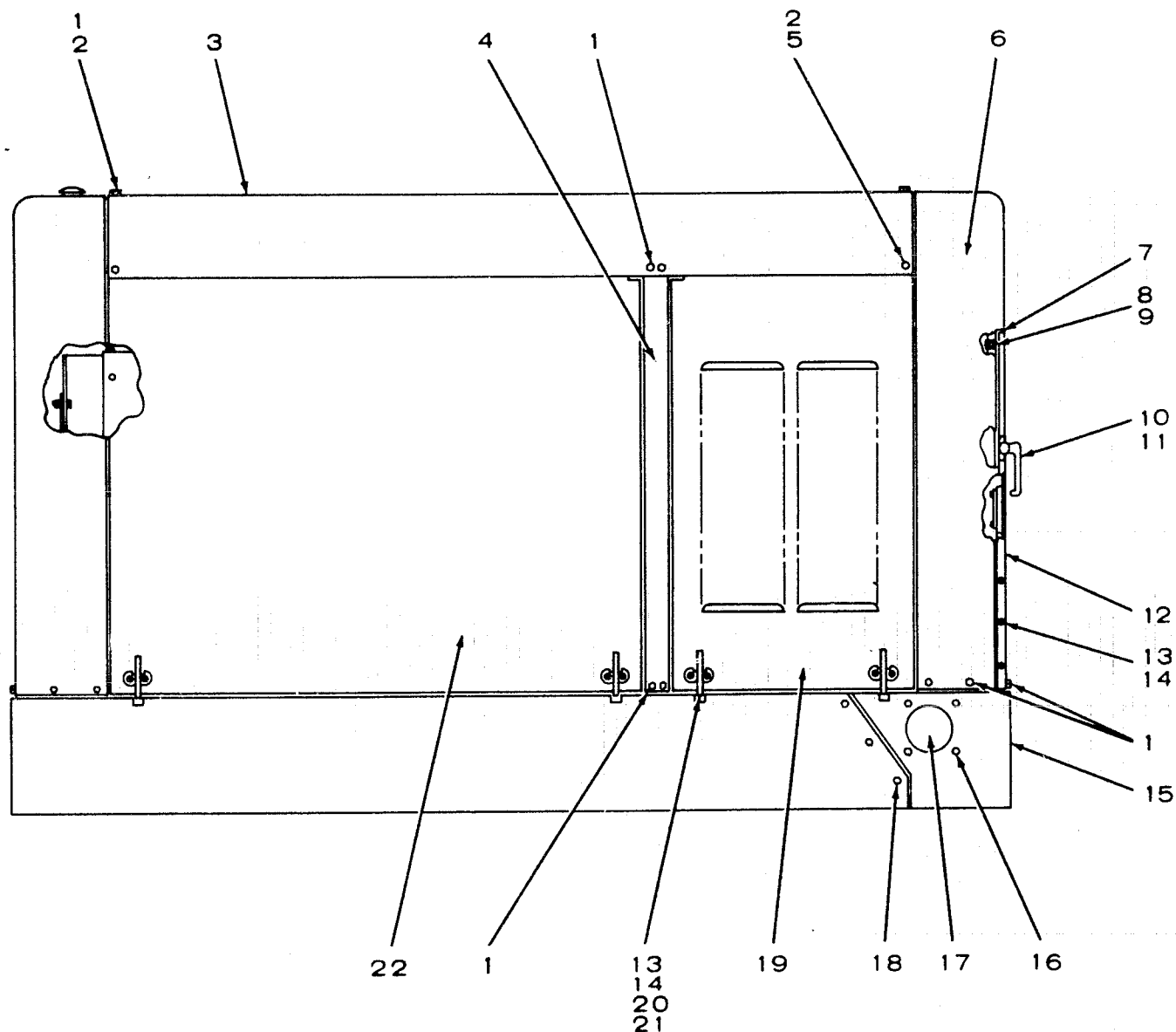
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	402-0214	2	Bolt, Front Engine Mounting
2	800-0520	2	Screw, Cap - Hex Head (3/4-10 x 1")
3	402-0371	2	Cushion, Vibration
4	520-0231	2	Stud, Steel
5	526-0115	2	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)
6	850-0045	3	Washer, Lock - Spring (5/16")
7	865-0007	2	Nut, Wing
8	416-0336	1	Frame, Battery Holddown
9	800-0071	4	Screw, Cap - Hex Head (7/16-14 x 1")
10	850-0055	4	Washer, Lock - Spring (7/16")
11	862-0004	4	Nut, Hex (7/16-14)
12	337-0090	1	Strap, Ground
13	800-0091	1	Screw, Cap - Hex Head (1/2-13 x 1-1/4")
14	856-0013	1	Washer, Lock - EIT (1/2")
15	850-0060	1	Washer, Lock - Spring (1/2")
16	862-0016	1	Nut, Hex (1/2-13)
17	800-0028	1	Screw, Cap - Hex Head (5/16-18 x 1")
18	332-1473	1	Lug, Solderless
19	856-0008	1	Washer, Lock - EIT (5/16")
20	862-0015	1	Nut, Hex (5/16-18)
21	403-0893	1	Chassis

CONTROL HOUSING



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	301-3154	1	Saddle, Control Box Housing
2	336-2264	1	Lead, Wire
3	821-0014	8	Screw, Cap - Self Locking (5/16-18 x 1/2")
4	815-0350	6	Screw, Tapping - Slotted Hex Head (10-32 x 3/8")
5	301-3156	1	Panel, Control Box
6	301-3155	1	Housing, Control Box
7	821-0018	6	Screw, Cap - Locking Head (1/4-20 x 5/8")
8	526-0018	5	Washer, Flat (17/64" ID x 5/8" OD x 1/16" Thk)
9	856-0006	1	Washer, Lock - EIT (1/4")
10	870-0212	6	Nut, Hex - Self Locking (1/4-20)
11	821-0010	7	Screw, Cap - Locking Head (1/4-20 x 1/2")
12	508-0203	1	Bushing, Nylon
13	234-0361	1	Wrapper, End Bell

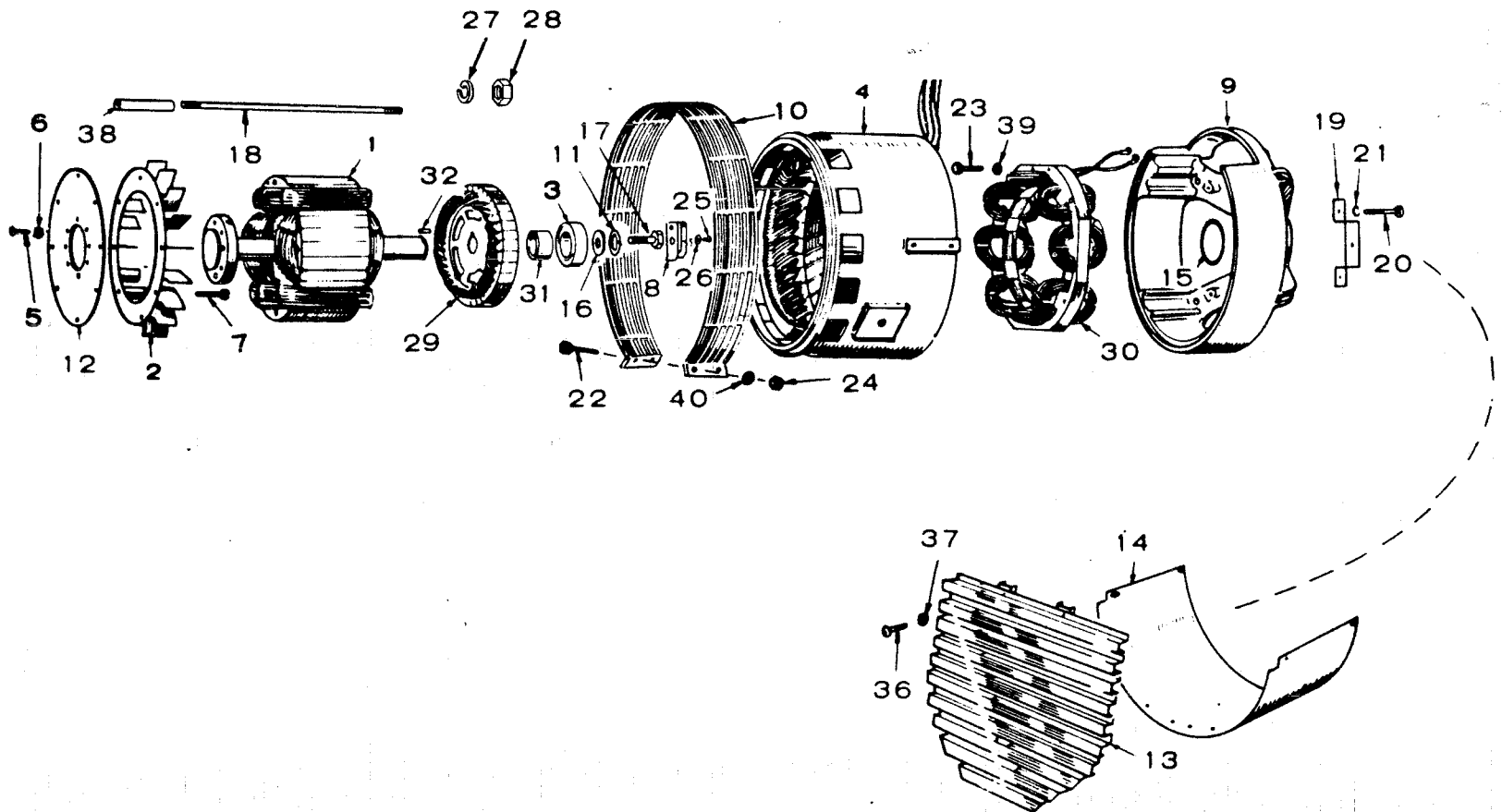
HOUSING



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	821-0014	24	Screw, Cap - Locking Head (5/16-18 x 1/2")
2	870-0113	12	Nut, Retainer (5/16-18)
3	PANEL, TOP HOUSING		
	405-1779	1	Dry Manifold
	405-1813	1	Wet Manifold
4	405-1776	2	Support, Housing Center
5	821-0016	4	Screw, Cap - Locking Head (5/16-18 x 3/4")
6	405-1775	1	Panel, Rear Housing
7	405-1777	1	Door, Rear Housing
8	870-0106	3	Nut, Speed
9	809-0059	3	Screw, Sheet Metal - Pan Head (#14 x 1/2")
10	406-0157	1	Handle, Lock (Includes Keys)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
11	406-0089	1	Catch
12	405-1780	1	Panel, Rear Housing Access
13	813-0098	22	Screw, Machine - Roundhead (#10-32 x 3/8")
14	850-0030	22	Washer, Lock - Spring (#10)
15	403-0894	1	Chassis, Rear Housing
16	821-0010	8	Screw, Cap - Self Locking (1/4-20 x 1/2")
17	403-0895	2	Cover, Conduit Opening
18	821-0029	6	Screw, Cap - Self Locking (3/8-16 x 3/4")
19	405-1778	2	Panel, Side
20	870-0053	16	Nut, Hex (#10-32)
21	406-0105	8	Fastener, Housing Holddown
22	405-1774	2	Door, Removable

GENERATOR

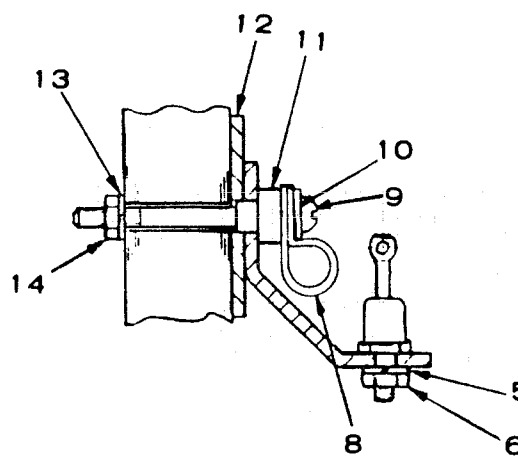
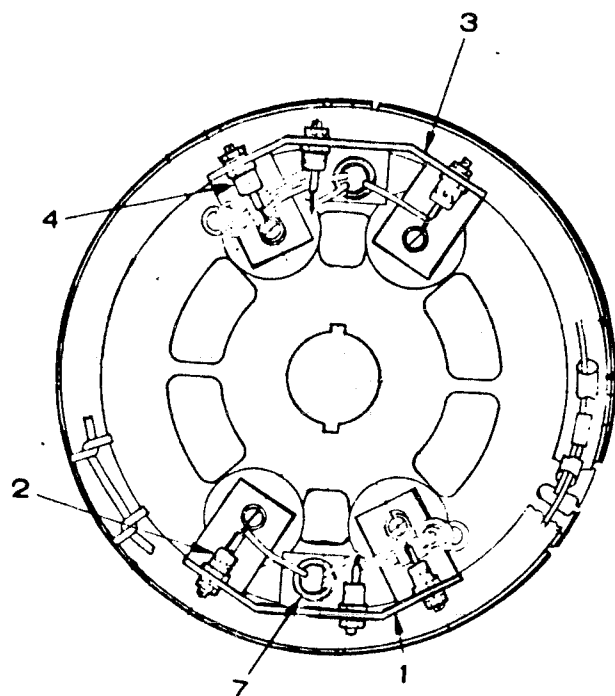


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	201-2673	1	Rotor Assembly, Wound (Includes Parts Marked †)
2	205-0089	1	†Blower
3	510-0101	1	†Bearing
4	STATOR ASSEMBLY, WOUND		
	220-2001	1	50 Hertz
	220-1458	1	15R Sets
	220-1606	1	9XR Sets
5	805-0033	8	Bolt, Place - Drive Disc to Hub
6	526-0259	8	Washer, Flat (11/16" ID x 1-3/8" OD x 12 Ga. Thk)
7	805-0018	8	Bolt, Place - Drive Disc to Engine
8	150-0717	1	Switch Assembly, Overspeed
9	211-0185	1	Bell, End
10	234-0368	1	Screen, Generator
11	850-0079	1	†Washer, Lock - Spring (3/4")
12	232-2078	1	†Disc, Generator Drive
13	234-0370	1	Grille, Generator Air Inlet (Unhoused Sets)
14	234-0361	1	Wrapper, Generator End Bell (Unhoused Sets)
15	509-0125	1	Seal, "O" Ring
16	526-0238	1	†Washer, Bearing Retainer
17	800-0513	1	†Screw, Cap - Hex Head - Bearing Retainer (3/4-10 x 1-1/2")
18	STUD, GENERATOR THROUGH		
	520-0724	4	70 KR Sets
	520-0726	4	85 KR Sets
19	150-1456	1	Bracket and Point Assembly - Overspeed

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
20	800-0003	2	Screw, Cap - Hex Head (1/4-20 x 1/2")
21	850-0040	8	Washer, Lock - Spring (1/4")
22	800-0008	2	Screw, Cap - Hex Head (1/4-20 x 1-1/4")
23	800-0009	4	Screw, Cap - Hex Head (1/4-20 x 1-1/2")
24	862-0001	2	Nut, Hex (1/4-20)
25	812-0029	1	Screw, Machine - Roundhead (3/8-16 x 3/4")
26	856-0010	1	Washer, Lock - EIT (3/8")
27	862-0011	4	Nut, Hex (3/8-16)
28	850-0050	4	Washer, Lock - Spring (3/8")
29	201-1739	1	†Rotor Assembly, Wound - Exciter (See Separate Group for Complete Breakdown)
30	220-2353	1	Stator Assembly, Wound - Exciter
31	232-2102	1	†Spacer, Bearing
32	515-0145	1	†Key, Exciter Rotor
34	800-0073	12	Screw, Cap - Hex Head (7/16-14 x 1-1/2")
35	850-0055	12	Washer, Lock - Spring (7/16")
36	812-0146	4	Screw, Machine - Roundhead (1/4-20 x 3/8")
37	850-0040	4	Washer, Lock - Spring (1/4")
38	503-0611	4	Hose, Insulator
39	850-0040	4	Washer, Lock - Spring (1/4")
40	850-0040	2	Washer, Lock - Spring (1/4")

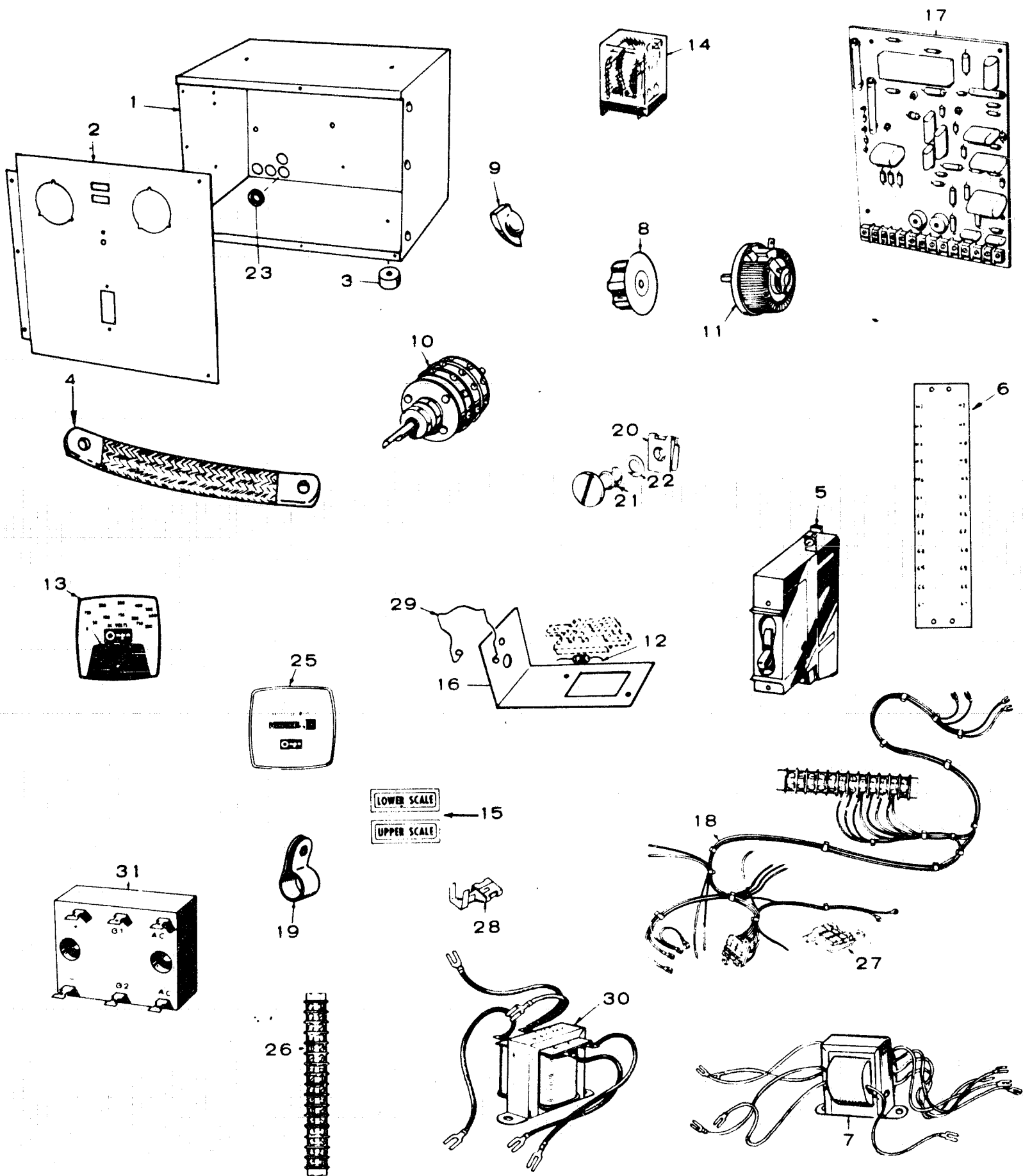
† - Parts Included in Wound Rotor Assembly.

EXCITER ROTOR



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	201-1739	1	Rotor Assembly, Wound - Exciter (Complete)
1	363-0055	1	Heat Sink, Rectifier - Negative
2	358-0015	3	Rectifier, Diode - Negative (CR4, CR5 & CR6)
3	363-0054	1	Heat Sink, Rectifier - Positive
4	358-0016	3	Rectifier, Diode - Positive (CR1, CR2 & CR3)
5	850-0030	6	Washer, Lock Spring (#10) Diode Mounting
6	870-0053	6	Nut, Hex - Diode Mounting (10-32)
7	508-0093	2	Grommet, Rubber
8	332-0050	2	Clip, Wire
9	813-0110	4	Screw, Roundhead - Heat Sink Mounting (10-32 x 2")
10	526-0009	4	Washer, Flat - Heat Sink Mounting (#10)
11	508-0124	4	Bushing, Insulating - Heat Sink Mounting
12	508-0156	4	Washer, Insulating - Heat Sink Mounting
13	850-0030	4	Washer, Lock Spring - Heat Sink Mounting (#10)
14	870-0053	4	Nut, Hex - Heat Sink Mtg. (10-32)

CONTROL (AC PORTION) SETS WITHOUT METER PANEL



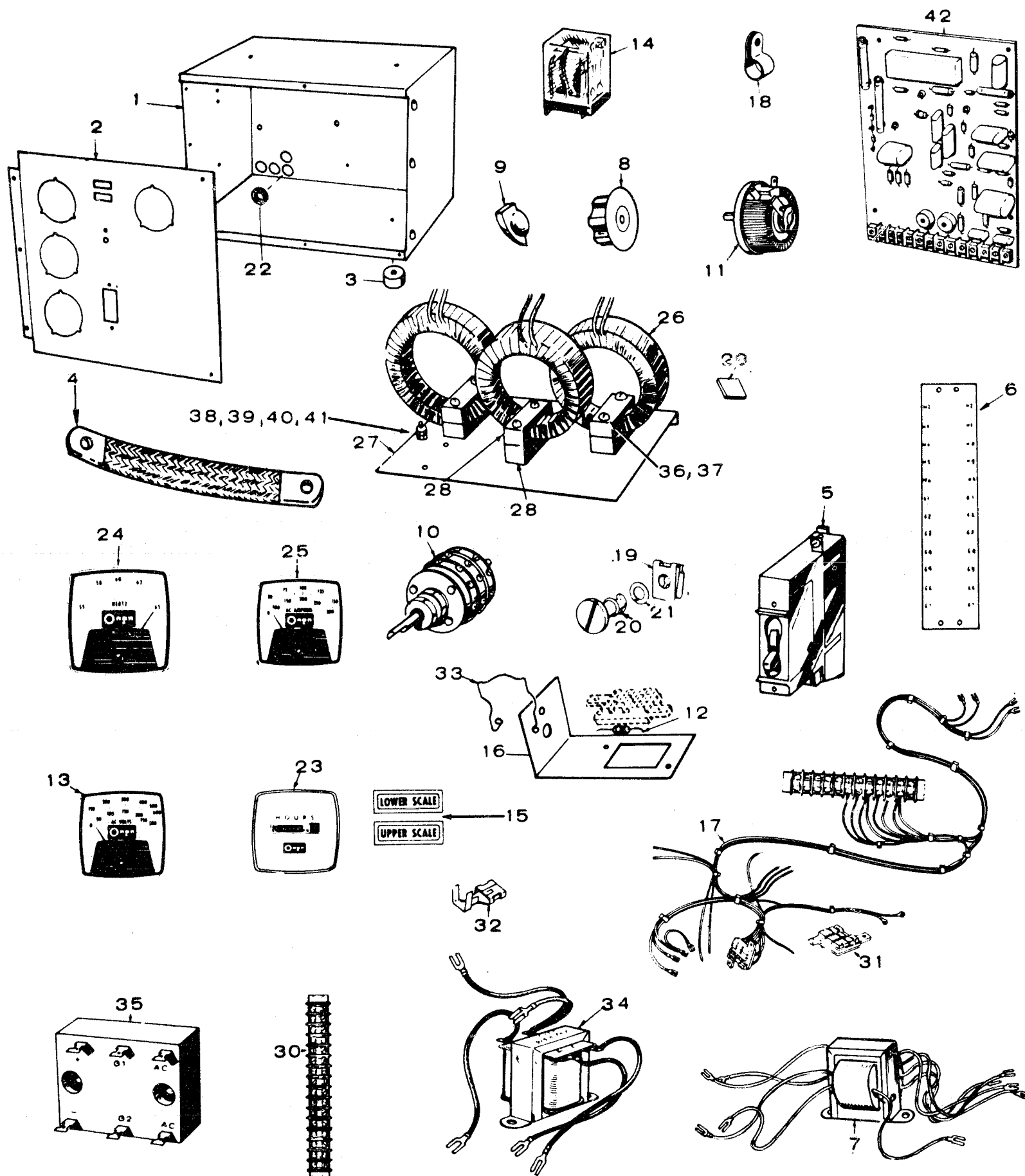
CONTROL (AC PORTION) SETS WITHOUT METER PANEL

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	301-3158	1	Box, Control
2	PANEL, CONTROL		
	301-3274	1	15R and 515R Sets
	301-3821	1	9XR Sets
3	402-0078	4	Dampener, Vibration
4	337-0049	1	Strap, Ground
5	320-0431	1	Breaker, Circuit (2 Amp)
6	332-1248	1	Strip, Marker
7	315-0431	1	Transformer, Voltage
8	303-0032	1	Knob, Rheostat
9	303-0076	1	Knob, Selector Switch
10	308-0012	1	Switch, Selector
11	303-0170	1	Rheostat
12	350-0556	1	*Resistor (47,000-Ohm, 1/2 Watt)
13	VOLTMETER		
	302-0718	1	15R and 515R Sets
	302-0779	1	9XR Sets
14	307-1061	1	Relay, Voltage Selector - 15R and 515R Sets
15	LIGHT - 15R AND 515R SETS		
	322-0130	1	Lower Scale
	322-0131	1	Upper Scale
16	301-3244	1	Bracket, Relay Mounting - 15R and 515R Sets

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
17	332-1956	1	Regulator Board, Voltage (See Separate Group for Complete Breakdown)
18	HARNESS, WIRING (INCLUDES PARTS MARKED *)		
	338-0764	1	15R and 515R Sets
	338-0766	1	9XR Sets
19	332-0050	2	Clip, Tinnerman
20	406-0332	2	Fastener
21	406-0333	2	Stud, Fastener
22	406-0334	2	Washer, Stud Fastener
23	508-0001	4	Grommet
25	METER, RUNNING TIME		
	302-0466	1	60 Hertz
	302-0469	1	50 Hertz
26	332-0607	1	*Block, Terminal
27	323-0764	1	*Socket, Relay - 15R and 515R Sets
28	332-1280	As Req	*Terminal, Crimp
29	307-1157	1	Spring, Relay Holddown - 15R and 515R Sets
30	315-0384	1	Reactor, Commutator
31	305-0524	1	Rectifier, Bridge

* - Parts Included in Wiring Harness.

CONTROL (AC PORTION) SETS WITH METER PANEL



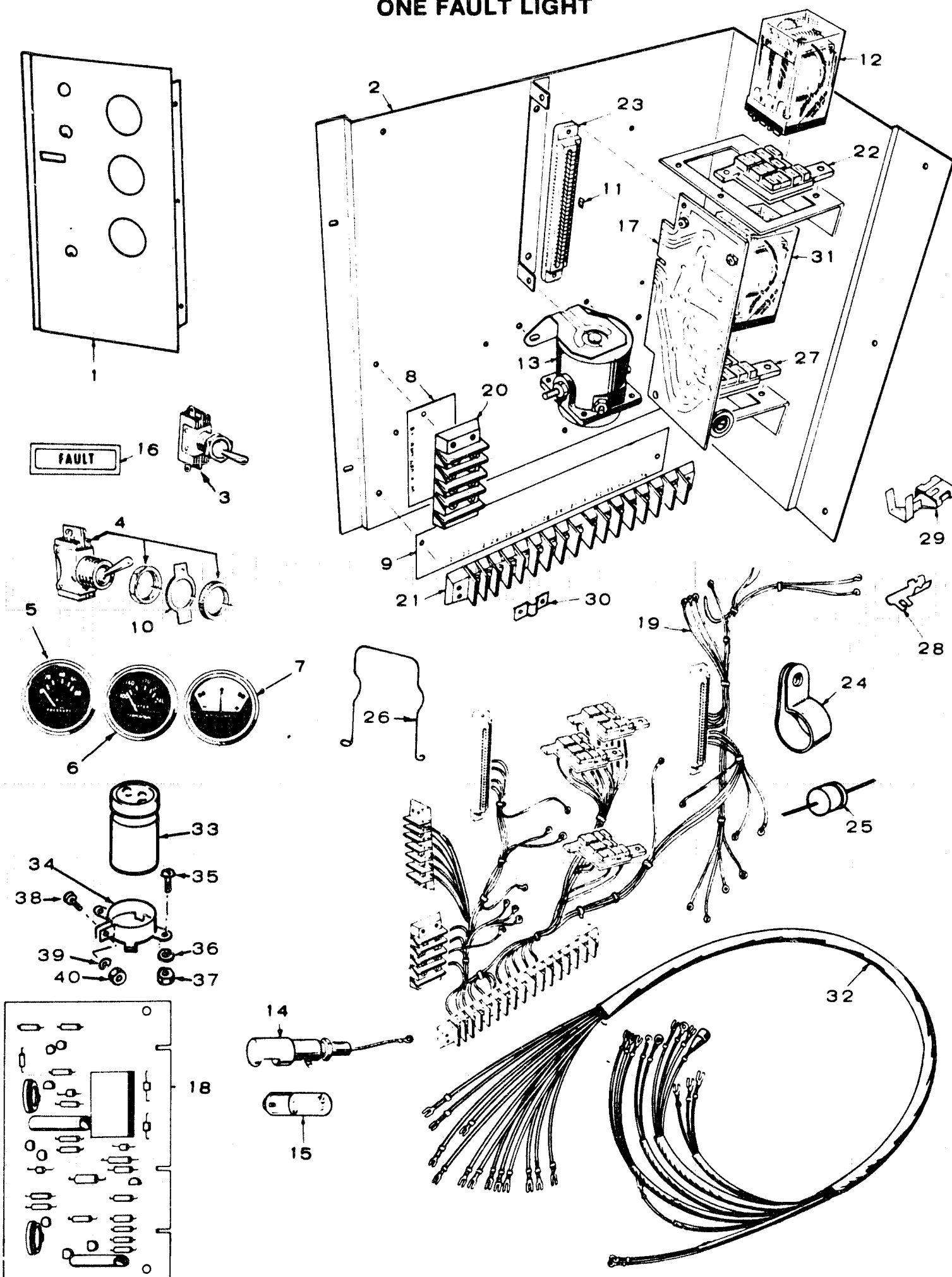
CONTROL (AC PORTION) SETS WITH METER PANEL

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	301-3158	1	Box, Control
2	PANEL, CONTROL		
	301-8170	1	15R and 515R Sets
	301-3342	1	9XR Sets
3	402-0078	4	Dampener, Vibration
4	337-0049	1	Strap, Ground
5	320-0431	1	Breaker, Circuit (2 Amp)
6	332-1242	1	Strip, Marker
7	315-0431	1	Transformer, Voltage
8	303-0032	1	Knob, Rheostat
9	303-0076	1	Knob, Selector
10	308-0284	1	Switch, Selector
11	303-0170	1	Rheostat
12	350-0556	1	*Resistor (47,000-Ohm, 1/2 Watt)
13	VOLTMETER		
	302-0718	1	15R and 515R Sets
	302-0779	1	9XR Sets
14	307-1061	1	Relay, Voltage Selector - 15R & 515R Sets
15	LIGHT - 15R AND 515R SETS		
	322-0131	1	Upper Scale
	322-0130	1	Lower Scale
16	301-3244	1	Bracket, Relay Mounting - 15R & 515R Sets
17	HARNESS, WIRING (Includes Parts Marked *)		
	338-0730	1	15R & 515R Sets
	338-0759	1	9XR Sets
18	332-0050	2	Clip, Tinnerman
19	406-0332	2	Fastener
20	406-0333	2	Stud, Fastener
21	406-0334	2	Washer, Stud Fastener
22	508-0001	4	Grommet, Rubber
23	METER, RUNNING TIME		
	302-0469	1	50 Hertz
	302-0466	1	60 Hertz

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
24	METER, FREQUENCY		
	302-0221	1	60 Hertz
	302-0256	1	50 Hertz
25	AMMETER		
	302-0722	1	15R & 515R Sets (Dual Scale) (0-200/0-400)
	302-0410	1	9XR Sets (0-150)
26	TRANSFORMER, CURRENT		
	302-0608	3	15R & 515R Sets
	302-0079	3	9XR Sets
27	302-0729	1	Bracket, Transformer Mounting
28	CLAMP, TRANSFORMER		
	302-0235	3	Upper
	302-0236	3	Lower
29	302-0253	As Req	Shim, Transformer Mounting
30	332-0795	1	*Block, Terminal
31	323-0764	1	*Socket, Relay
32	332-1280	As Req	*Terminal, Crimp
33	307-1157	1	Spring, Relay Holddown
34	315-0384	1	Reactor, Commutator
35	305-0524	1	Rectifier, Bridge
36	813-0110	6	Screw, Machine - Roundhead (#10-32 x 2")
37	854-0010	8	Washer, Lock IT (#10)
38	815-0203	1	Screw, Machine - Roundhead (#10-32 x 7/8")
39	871-0010	3	Nut, Hex (#10-32)
40	526-0049	2	Washer, Flat (.200" ID x 7/16" OD x 1/32" Thk)
41	856-0003	1	Washer, Lock EIT (1/2")
42	332-1956	1	Regulator Board, Voltage (See Separate Group for Complete Breakdown)

* - Parts Included in Wiring Harness.

CONTROL (ENGINE PORTION) ONE FAULT LIGHT

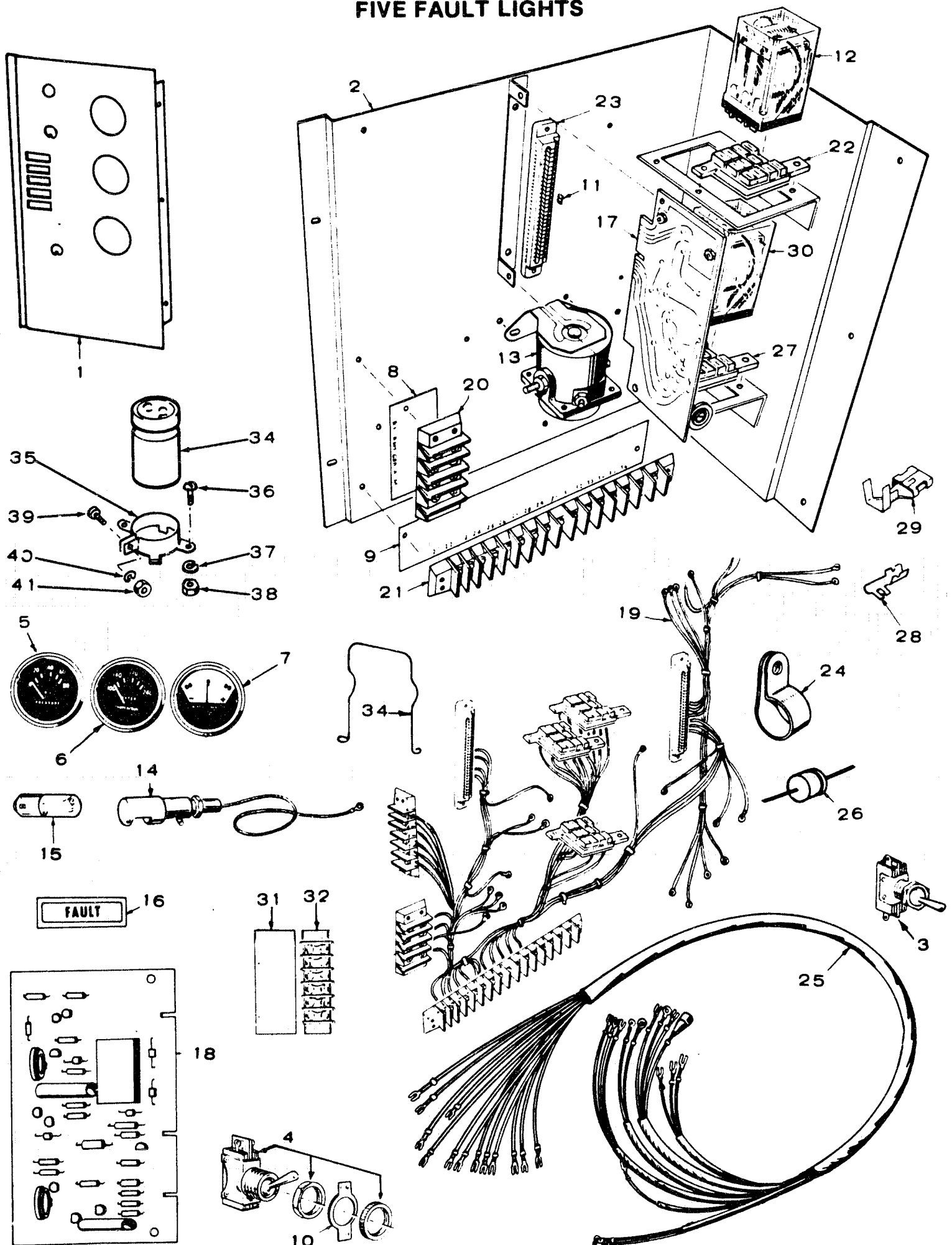


CONTROL (ENGINE PORTION) ONE FAULT LIGHT

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	301-3165	1	Panel, Engine Control	27	323-0764	1	*Socket, Relay
2	301-3253	1	Bracket, Engine Control	28	332-1269	As Req	*Terminal, Printed Circuit Board
3	308-0138	1	Switch, Selector	29	332-1280	As Req	*Terminal, Crimp
4	308-0002	1	Switch, Panel Light	30	332-1043	1	*Jumper, Terminal
5	193-0243	1	Gauge, Oil Pressure	31	307-1061	1	Relay, Starter Protection
6	193-0245	1	Gauge, Water Temperature	32	338-0505	1	Harness, Wiring - Engine to Control
7	302-0061	1	Ammeter, Charge (30-0-30)	33	356-0072	1	Capacitor - Begin Serial #A780294689 During Spec T
8	332-1239	1	Strip, Marker (B+, Remote, Ground & Alarm)	34	356-0070	1	Bracket, Capacitor Mounting - Begin Serial #A780294689 During Spec T
9	332-1241	1	Strip, Marker (21 through 36)	35	812-0076	2	Screw, Machine - Roundhead (#8-32 x 5/16") - Begin Serial #A780294689 During Spec T
10	308-0003	1	Plate, Switch - ON/OFF	36	850-0025	2	Washer, Lock - Spring (#8) - Begin Serial #A780294689 During Spec T
11	332-1276	2	Plug, Keying	37	860-0008	2	Nut, Hex (8-32) Begin Serial #A780294689 During Spec T
12	307-1058	2	Relay (1) Start-Disconnect (1) Ignition	38	812-0065	1	Screw, Machine - Roundhead (#6-32 x 5/8") Begin Serial #A780294689 During Spec T
13	307-1031	1	Relay, Start Solenoid	39	850-0020	1	Washer, Lock - Spring (#6) Begin Serial #A780294689 During Spec T
14	322-0149	1	Holder, Lamp	40	860-0006	1	Nut, Hex (6-32) Begin Serial #A780294689 During Spec T
15	322-0004	1	Lamp, Panel				
16	322-0128	1	Lamp, Fault - Standard				
17	300-0733	1	Control, Cranker - Standard				
18	300-0679	1	Monitor, Engine Control (See Separate Group for Components)				
19	338-1065	1	Harness, Wiring (Includes Parts Marked *)				
20	332-0537	1	*Block, Terminal				
21	332-0795	1	*Block, Terminal				
22	323-0765	2	Socket, Relay				
23	332-1271	2	*Housing, Printed Circuit Board				
24	332-0051	1	Clip, Tinnerman				
25	357-0004	1	Diode, Rectifier (Part of Crankers Control)				
26	307-1157	3	Spring, Relay Holddown				

* - Parts Included in Wiring Harness.

CONTROL (ENGINE PORTION) FIVE FAULT LIGHTS

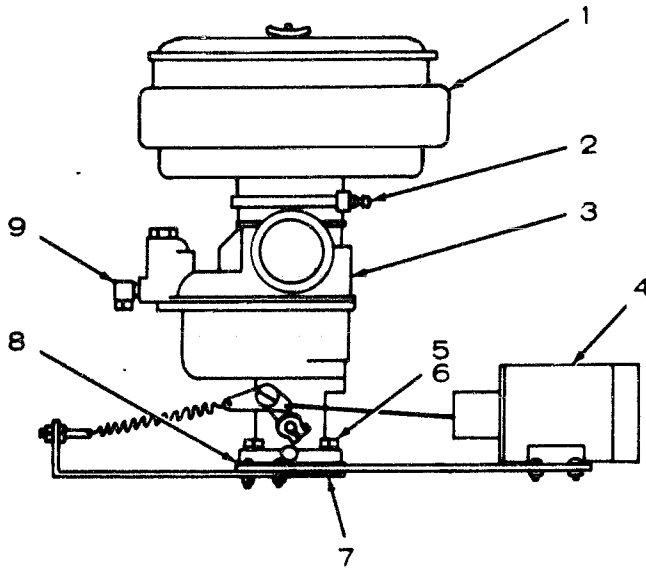


CONTROL (ENGINE PORTION) FIVE FAULT LIGHTS

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	301-3267	1	Panel, Engine Control	25	338-0505	1	Harness, Wiring - Control to Engine
2	301-3253	1	Bracket, Engine Control	26	357-0004	1	Rectifier, Diode (Part of Standard Cranker)
3	308-0138	1	Switch, Selector	27	323-0764	1	*Socket, Relay
4	308-0002	1	Switch, Panel Light	28	332-1269	As Req	*Terminal, Printed Circuit Board
5	193-0243	1	Gauge, Oil Pressure	29	332-1280	As Req	*Terminal, Crimp
6	193-0245	1	Gauge, Water Temperature	30	307-1061	1	Relay, Starter Protection
7	302-0061	1	Ammeter (30-0-30)	31	332-0699	1	*Block, Terminal
8	332-1239	1	Strip, Marker (B+, Alarm, Remote & Ground)	32	332-1240	1	Strip, Marker
9	332-1559	1	Strip, Marker	34	356-0072	1	Capacitor - Begin Serial #A780294689 During Spec T
10	308-0003	1	Plate, Switch - On/Off	35	356-0070	1	Bracket, Capacitor Mounting - Begin Serial #A780294689 During Spec T
11	332-1276	1	Plug, Keying	36	812-0076	2	Screw, Machine - Roundhead - Begin Serial #A780294689 During Spec T (#8-32 x 5/16")
12	307-1058	2	Relay (1) Start-Disconnect (1) Ignition	37	850-0025	2	Washer, Lock - Spring (#8) - Begin Serial #A780294689 During Spec T
13	307-1031	1	Relay, Start Solenoid	38	660-0008	2	Nut, Hex (8-32) - Begin Serial #A780294689 During Spec T
14	322-0149	1	Holder, Lamp	39	812-0065	1	Screw, Machine - Roundhead (#6-32 x 5/8") - Begin Serial #A780294689 During Spec T
15	322-0004	1	Lamp, Panel	40	850-0020	1	Washer, Lock - Spring (#6) - Begin Serial #A780294689 During Spec T
16	LAMP, FAULT			41	860-0006	1	Nut, Hex (#6-32) - Begin Serial #A780294689 During Spec T
	322-0107	1	Overcrank				
	322-0108	1	Low Oil Pressure				
	322-0109	1	Hi Engine Temperature				
	322-0110	1	Low Engine Temperature				
	322-0111	1	Overspeed				
17	300-0733	1	Control, Cranker				
18	300-0681	1	Monitor, Engine Control (See Separate Group for Complete Breakdown)				
19	338-1066	1	Harness, Wiring (Includes Parts Marked *)				
20	332-0537	1	*Block, Terminal (4 Place)				
21	332-1005	1	*Block, Terminal				
22	323-0765	2	Socket, Relay				
23	332-1271	2	*Housing, Printed Circuit Board Terminal				
24	332-0051	1	Clip, Tinnerman				

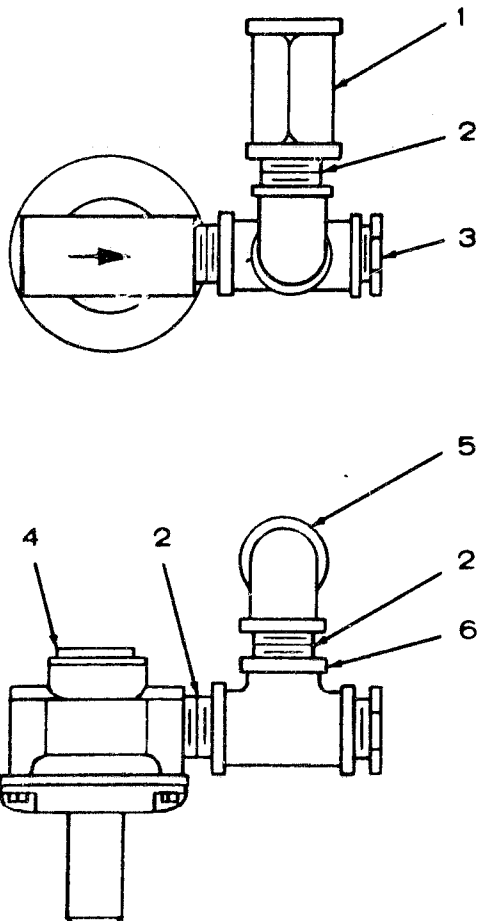
* - Parts Included in Wiring Harness.

CARBURETOR PARTS



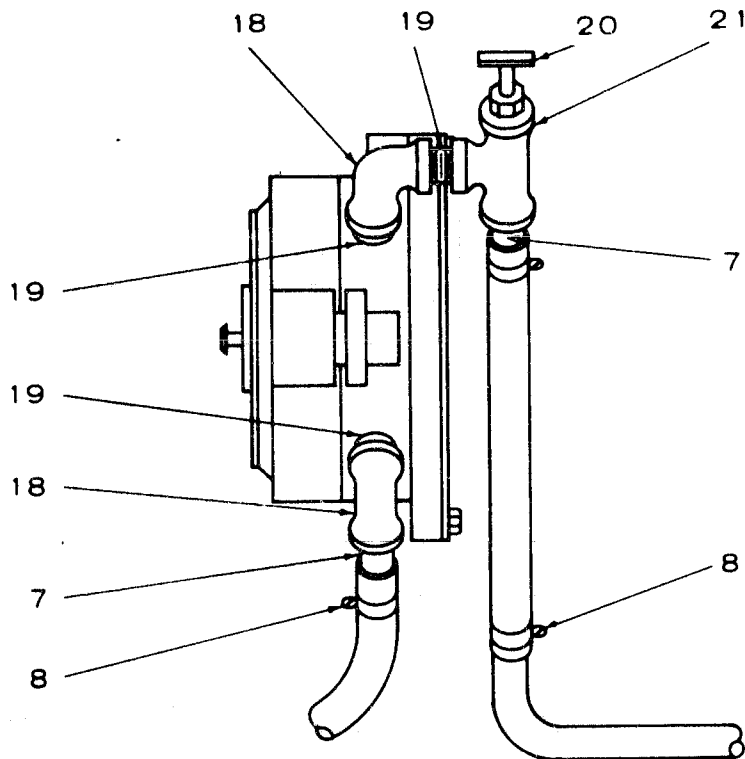
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	140-0524	1	Cleaner, Air (Includes Element)
2	140-0525	1	Adapter, Air Cleaner
3	141-0825	1	Carburetor
4		1	Anti Dieseling (See Separate Group for Complete Breakdown)
5	110-0445	4	Nut, Hex (5/16-24)
6	850-0045	4	Washer, Lock - Spring (5/16")
7	145-0189	2	Gasket, Carburetor Flange
8	145-0185	1	Gasket, Carburetor Flange
9	502-0004	1	Elbow, Inverted Male

VALVE AND REGULATOR SYSTEM

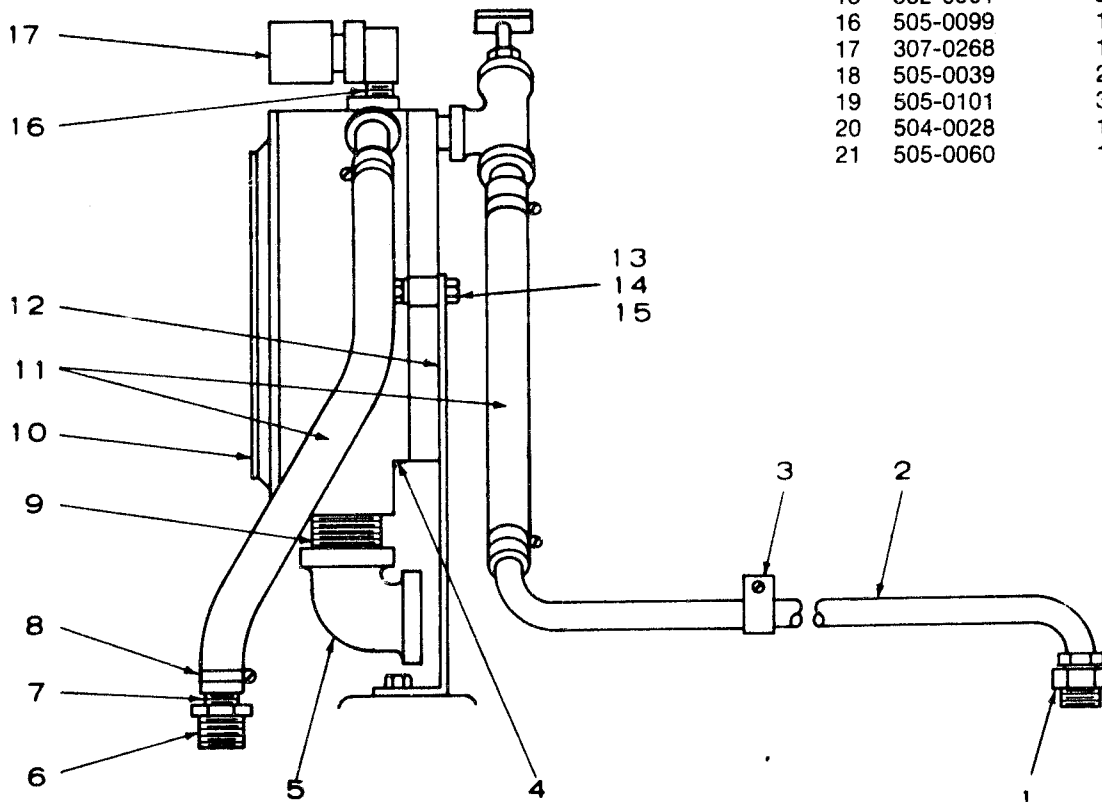


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	148-0626	1	Valve, Adjusting
2	505-0004	3	Nipple, Pipe
3	505-0129	1	Bushing, Reducer
4	148-0601	1	Regulator
5	505-0041	1	Elbow, Pipe
6	505-0304	1	Tee, Pipe

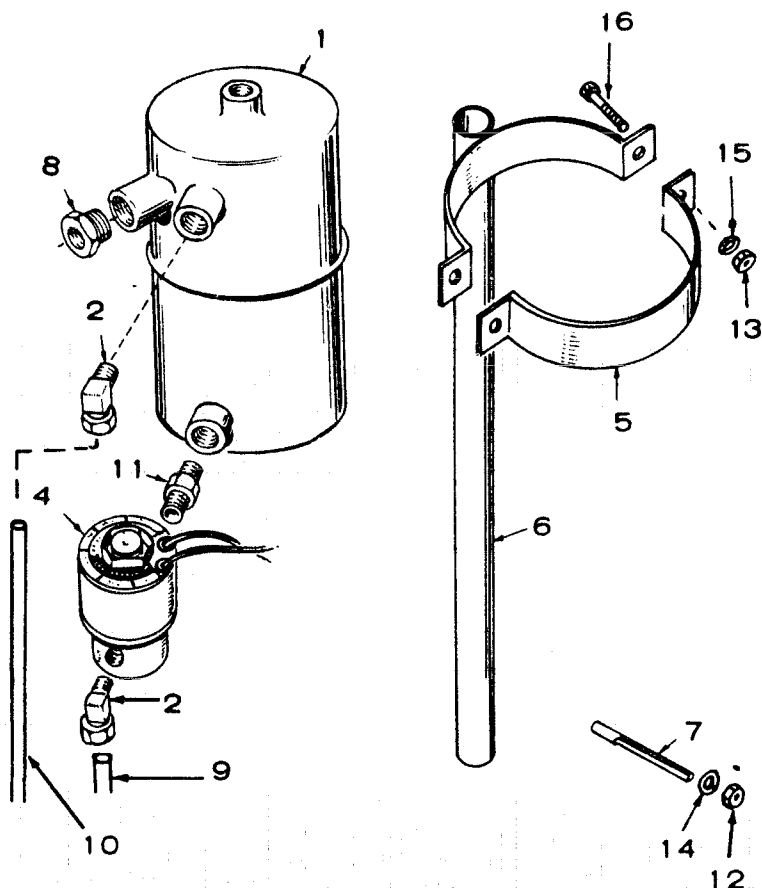
VAPORIZER SYSTEM



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	502-0227	1	Connector, Inverted Male
2	131-0192	1	Line, Water
3	148-0274	1	Bracket, Hose
4	504-0005	1	Cock, Drain
5	505-0356	1	Elbow, Reducer
6	505-0019	1	Bushing, Reducer
7	505-0135	3	Nipple, Half
8	503-0189	4	Clamp, Hose
9	505-0107	1	Nipple
10	148-0625	1	Converter, Gas
11	503-0051	2	Hose
12	148-0631	1	Bracket, Vaporizer Mounting
13	800-0009	2	Screw, Cap - Hex Head (1/4-20 x 1-1/2")
14	850-0040	2	Washer, Lock - Spring (1/4")
15	862-0001	2	Nut, Hex (1/4-20)
16	505-0099	1	Nipple, Pipe
17	307-0268	1	Valve, Solenoid
18	505-0039	2	Elbow, Pipe
19	505-0101	3	Nipple, Close
20	504-0028	1	Cock, Drain
21	505-0060	1	Tee, Pipe

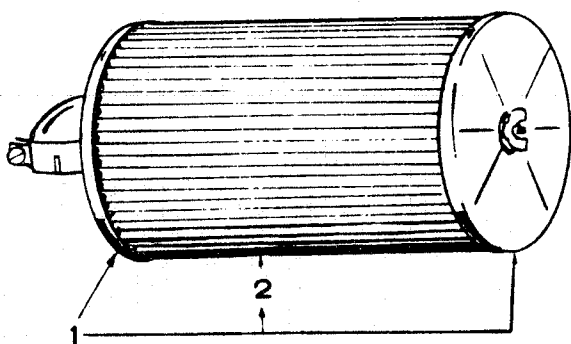


OPTIONAL RESERVOIR (DAY) TANK

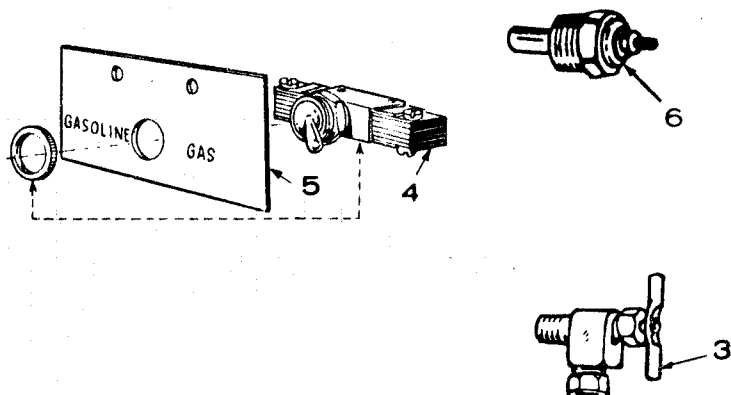


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	159-0294	1	Tank, Day
2	502-0024	3	Elbow
3	505-0057	2	Plug, Square Head
4	307-0565	1	Valve, Solenoid
5	159-0253	1	Clamp, Front
6	159-0678	1	Bracket, Tank Mounting
7	159-0681	1	Bolt, Wedge
8	159-0705	1	Reducer, Restricted
9	159-0667	1	Line, Fuel - Tank to Carburetor
10	159-0686	1	Line, Fuel - Tank to Pump
11	502-0082	1	Nipple, Hex
12	862-0015	1	Nut, Hex (5/16-18)
13	862-0001	2	Nut, Hex (1/4-20)
14	850-0045	1	Washer, Lock - Spring (5/16")
15	850-0040	2	Washer, Lock - Spring (1/4")
16	800-0007	2	Screw, Cap - Hex Head (1/4-20 x 1")

OPTIONAL MISCELLANEOUS ENGINE PARTS



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	140-0851	1	Cleaner, Air - Gaseous Fuels
2	140-0871	1	Element, Air Cleaner - Gaseous Fuels
3	504-0085	1	Valve, Fuel Shut Off
4	308-0005	1	Switch, Gas-Gasoline
5	308-0150	1	Bracket, Switch Mounting
6	193-0249	1	Sender, Oil Temperature

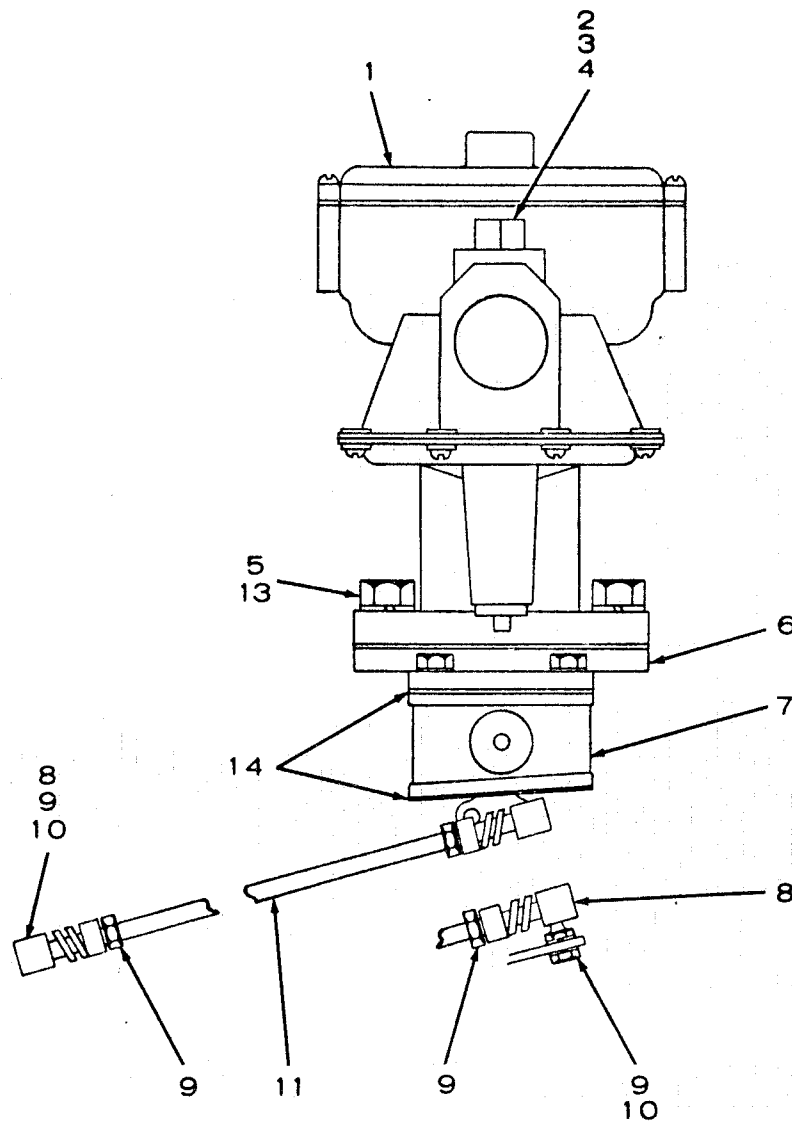


OPTIONAL INSTALLATION INDEX

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City Water Cooled, Water Cooled Exhaust Manifold	E11
Water Jacket Heater	E13

NOTE: For Field Conversion, order all Parts listed in the Installation Group.

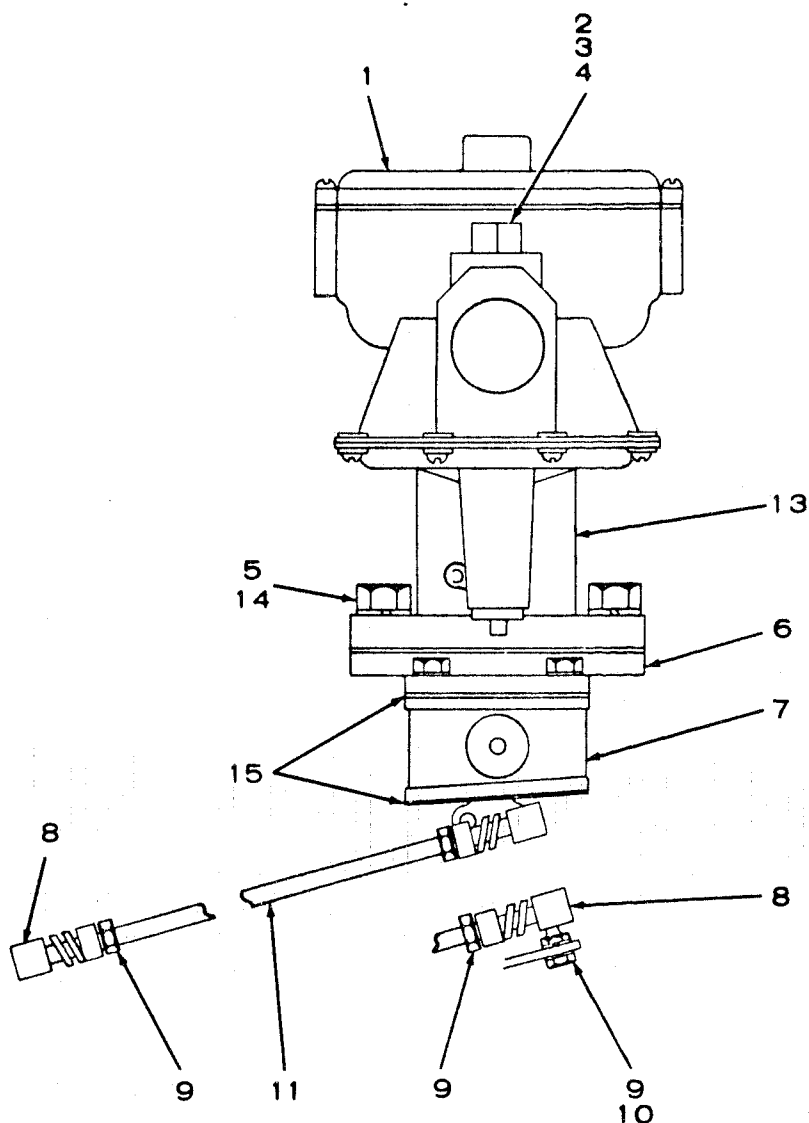
OPTIONAL CARBURETOR ASSEMBLY (NATURAL GAS)



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	148-0592	1	*Carburetor (Impco #200)
2	148-0601	1	*Valve, Thermal (Impco #T-30)
3	505-0102	1	Nipple, Close (3/4 x 1-3/8")
4	505-0129	1	Bushing, Reducer
5	800-0071	2	Screw, Cap - Hex Head (7/16-14 x 1")
6	145-0358	1	Adapter, Carburetor
7	145-0410	1	Body Assembly, Throttle
8	150-0638	2	Joint, Ball
9	115-0025	4	Nut, Hex (1/4-28")
10	850-0040	1	Washer, Lock - Spring (1/4")
11	520-0517	1	Stud
13	850-0055	2	Washer, Lock - Spring (1/4")
14	145-0185	2	Gasket

* - For components contact your nearest Impco dealer
or Impco Division, 16916 Gridley Place, Cerritos,
California 90701.

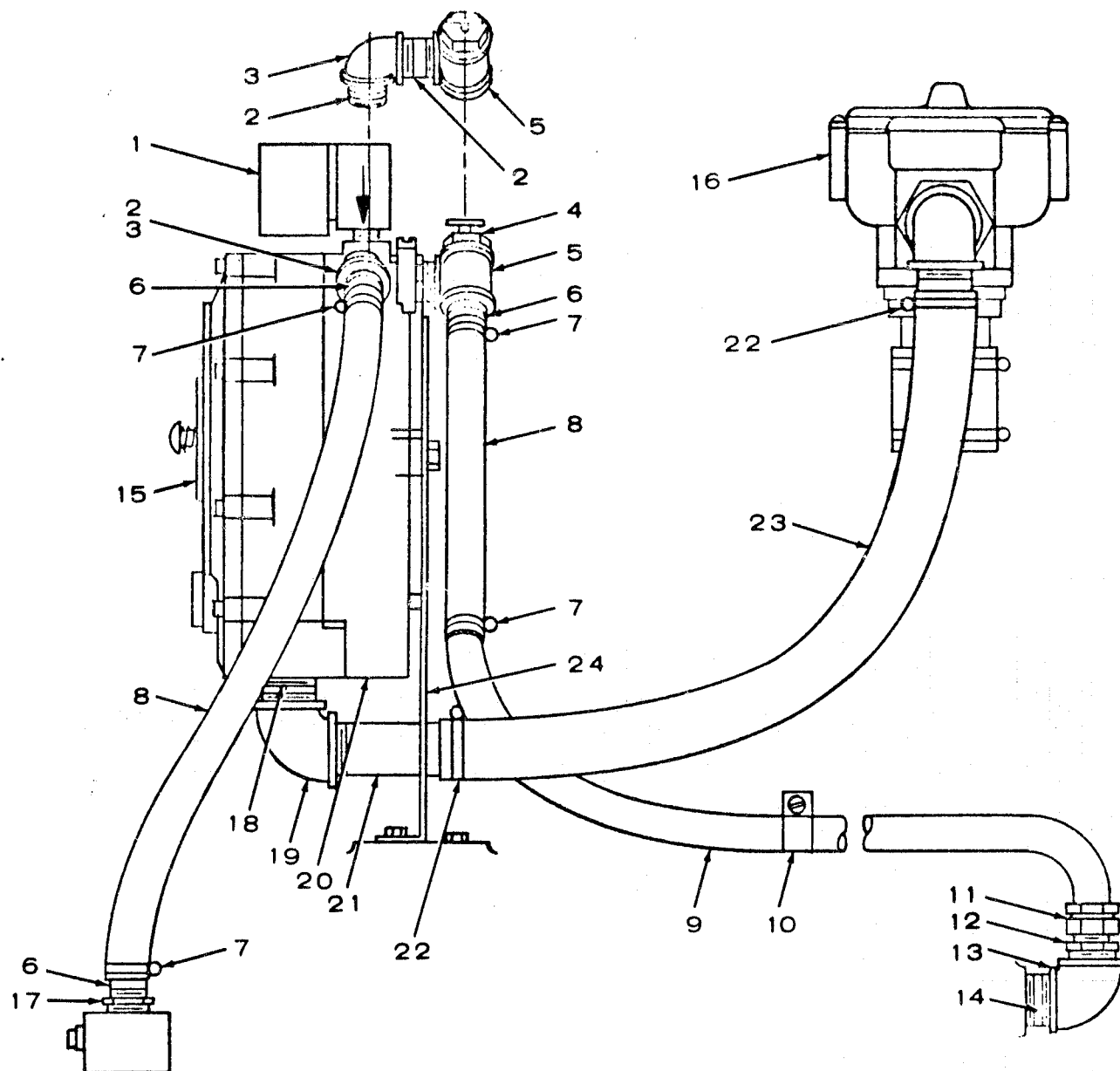
OPTIONAL CARBURETOR AND REGULATOR ASSEMBLY (NATURAL GAS AND LPG — MANUAL CHANGEOVER)



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	148-0592	1	*Carburetor (Impco #200 with 1-3/4" Flange and 3/16" Air Horn)
2	148-0601	1	*Valve, Thermal (Impco #T-30)
3	505-0102	1	Nipple, Close (3/4 x 1-3/8")
4	505-0129	1	Bushing, Reducer (1 x 3/4")
5	800-0071	2	Screw, Cap - Hex Head (7/16-14 x 1")
6	145-0358	1	Adapter, Carburetor
7	145-0328	1	Body Assembly, Throttle
8	150-0638	2	Joint, Ball
9	115-0025	4	Nut, Hex (1/4-28")
10	850-0040	1	Washer, Lock - Spring (1/4")
11	520-0629	1	Stud
13	148-0620	1	Collar, Shaft
14	850-0055	2	Washer, Lock - Spring (7/16")
15	145-0185	2	Gasket

* - For components contact your nearest Impco dealer or Impco Division, 16916 Gridley Place, Cerritos, California 90701.

OPTIONAL CARBURETOR AND CONVERTER ASSEMBLY (GASOLINE - LPG LIQUID)

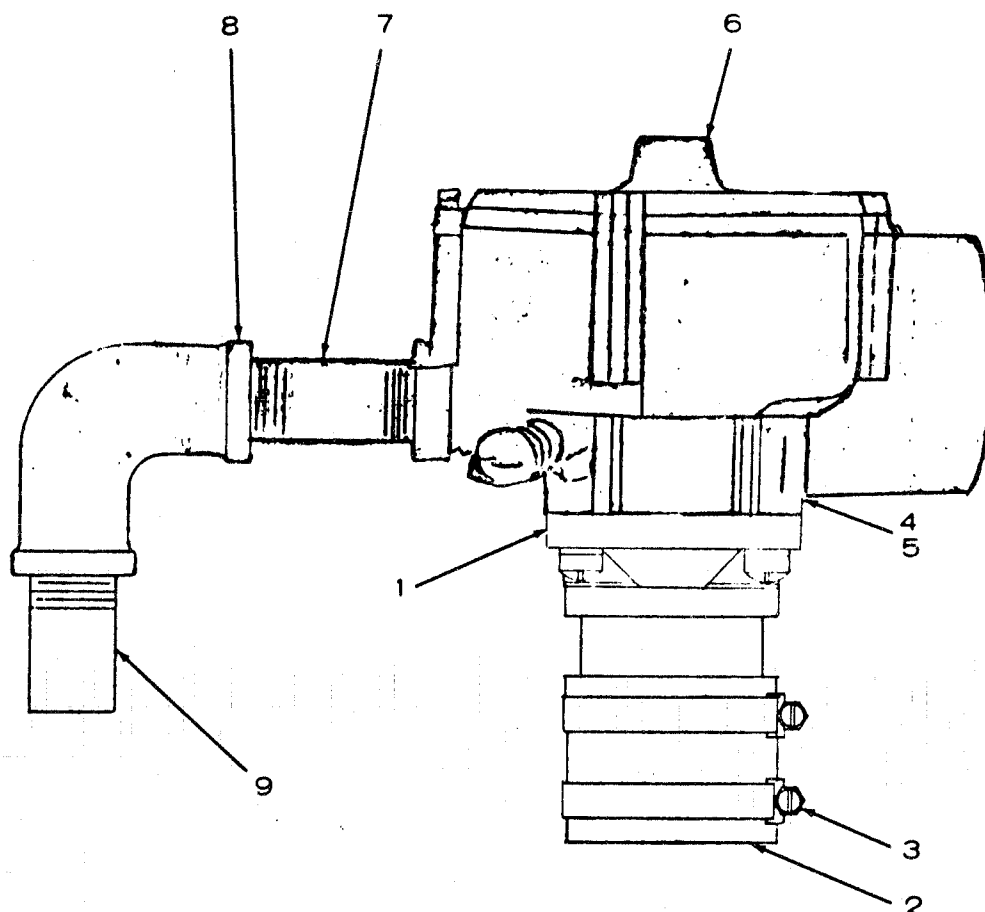


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	307-0268	1	Valve, Solenoid
2	505-0101	3	Nipple, Pipe (3/8 x 1")
3	505-0039	2	Elbow, Pipe (3/8")
4	504-0028	1	Cock, Drain (3/8")
5	505-0060	1	Tee, Pipe (3/8")
6	505-0135	3	Nipple, Half (3/8")
7	503-0189	4	Clamp, Hose
8		1	Hose, Order 42" of Bulk Hose #503-0386
9	131-0192	1	Line, Water
10	148-0274	1	Clamp, Loop Type
11	502-0227	1	Connector, Inverted Male
12	505-0021	1	Bushing, Reducer (3/4 x 1/2")
13	505-0132	1	Elbow, Pipe (3/4")
14	505-0071	1	Nipple, Pipe (3/4 x 1-1/4")
15	148-0625	1	*Converter Assembly, Gas (Impco Model EB)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
16	148-0668	1	Carburetor Regulator Assembly - LPG - See Optional Carburetor Assembly (Gasoline-LPG Liquid)
17	505-0019	1	Bushing, Reducer (1/2 x 3/8")
18	505-0107	1	Nipple, Short (1 x 2")
19	505-0356	1	Elbow, Reducer (1 x 3/4")
20	504-0005	1	Cock, Drain
21	505-0324	1	Nipple, Half (3/4 x 2")
22	503-0382	2	Clamp, Hose
23		1	Hose, Order 12" of Bulk Hose #503-0249
24	148-0631	1	Bracket, Vaporizer

* - For components contact your nearest Impco dealer or Impco Division, 16916 Gridley Place, Cerritos, California 90701.

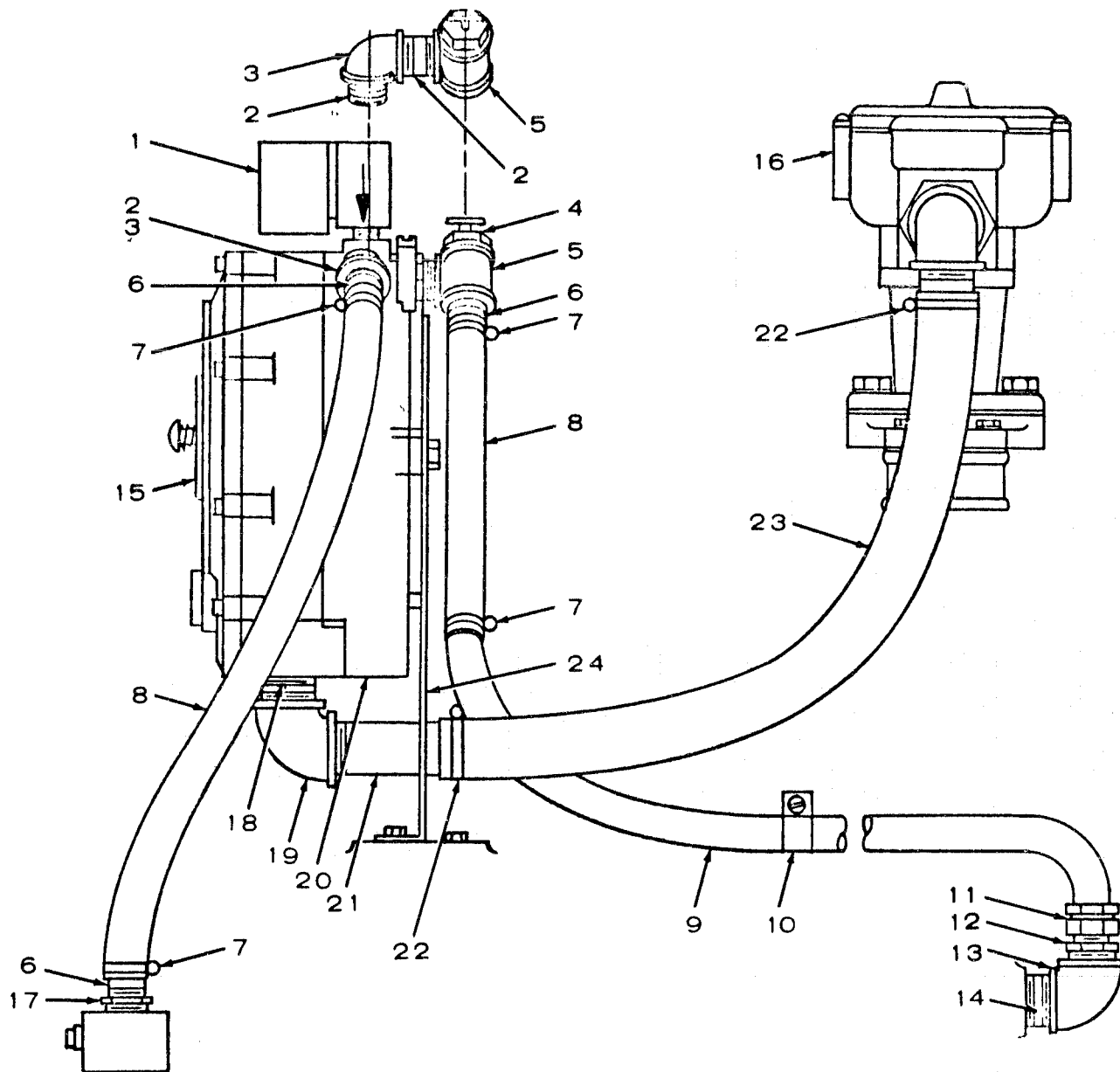
OPTIONAL CARBURETOR ASSEMBLY (GASOLINE - LPG LIQUID)



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	145-0396	1	Adapter, Carburetor
2	503-0550	1	Adapter, Hose
3	503-0354	2	Clamp
4		1	Gasket (Supplied with Mixer - Impco #G1-21)
5		4	Screw (Supplied with Mixer - Impco #51-14)
6	148-0598	1	*Carburetor Mixer (Impco #200 with 3-1/16" Air Horn)
7	505-0102	1	Nipple (3/4 x 1-3/8")
8	505-0132	1	Elbow (3/4" x 90°)
9	505-0324	1	Nipple, Half (3/4 x 2")

* - For components contact your nearest Impco dealer or Impco Division, 16916 Gridley Place, Cerritos, California 90701.

OPTIONAL CARBURETOR AND CONVERTER ASSEMBLY (LPG LIQUID)

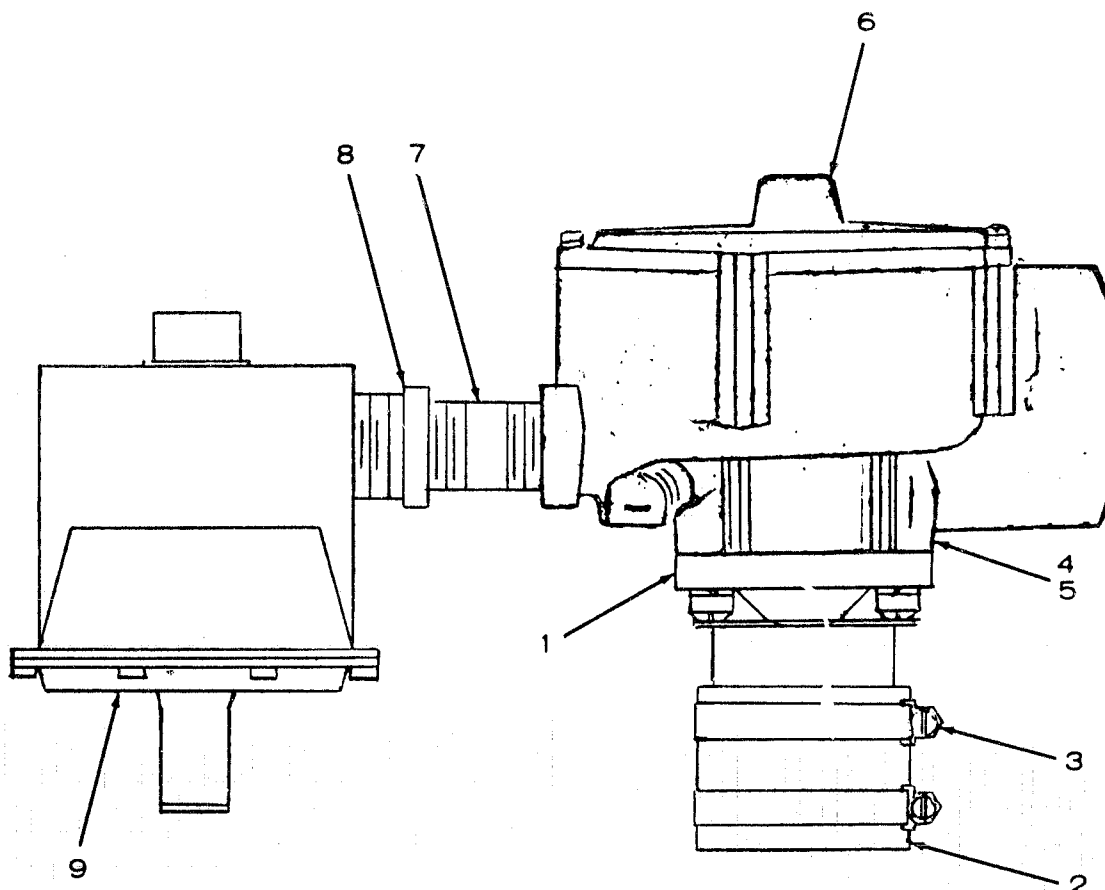


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	307-0268	1	Valve, Solenoid
2	505-0101	3	Nipple, Pipe (3/8 x 1")
3	505-0039	2	Elbow, Pipe (3/8")
4	504-0028	1	Cock, Drain (3/8")
5	505-0060	1	Tee, Pipe (3/8")
6	505-0135	3	Nipple, Half (3/8")
7	503-0189	4	Clamp, Hose
8		1	Hose, Order 42" of Bulk Hose #503-0386
9	131-0192	1	Line, Water
10	148-0274	1	Clamp, Loop Type
11	502-0227	1	Connector, Inverted Male
12	505-0021	1	Bushing, Reducer (3/4 x 1/2")
13	505-0040	1	Elbow, Pipe (1/2")
14	505-0106	1	Nipple, Pipe (1/2 x 1-1/2")
15	148-0625	1	*Converter Assembly, Gas (Impco model EB)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
16	148-0693	1	Carburetor and Regulator Solenoid Assembly, LPG (See Optional Carburetor Assembly LPG Liquid)
17	505-0019	1	Bushing, Reducer (1/2 x 3/8")
18	505-0107	1	Nipple, Short (1 x 2")
19	505-0356	1	Elbow, Reducer (1 x 3/4")
20	504-0005	1	Cock, Drain
21	505-0324	1	Nipple, Half (3/4 x 2")
22	503-0382	2	Clamp, Hose
23		1	Hose, Order 12" of Bulk Hose #503-0249
24	148-0631	1	Bracket, Vaporizer

* - For components contact your nearest Impco dealer
or Impco Division, 16916 Gridley Place, Cerritos,
California 90701.

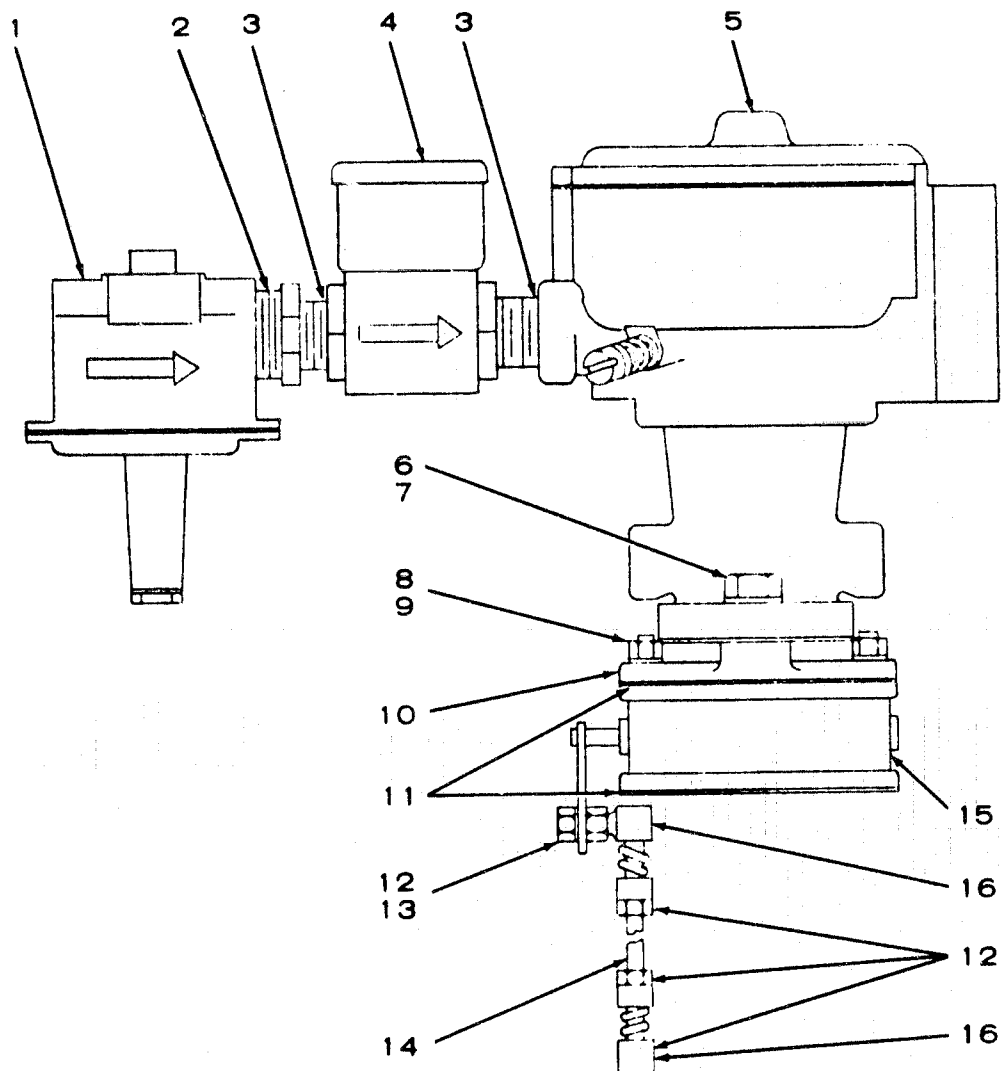
OPTIONAL CARBURETOR AND REGULATOR ASSEMBLY (NATURAL GAS — GASOLINE)



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	145-0396	1	Adapter, Carburetor
2	503-0550	1	Adapter, Hose
3	503-0354	2	Clamp
4		1	Gasket (Supplied with Mixer) - Impco #G7-21
5		4	Screw (Supplied with Mixer) - Impco #51-19
6	148-0598	1	*Carburetor Mixer - (Impco #200 with 3-1/16" Air Horn)
7	505-0102	1	Nipple (3/4 x 1-3/8")
8	505-0129	1	Bushing, Reducer (1 x 3/4")
9	148-0601	1	*Regulator - Natural Gas (Impco #T-30)

* - For components contact your nearest Impco dealer or Impco Division, 16916 Gridley Place, Cerritos, California 90701.

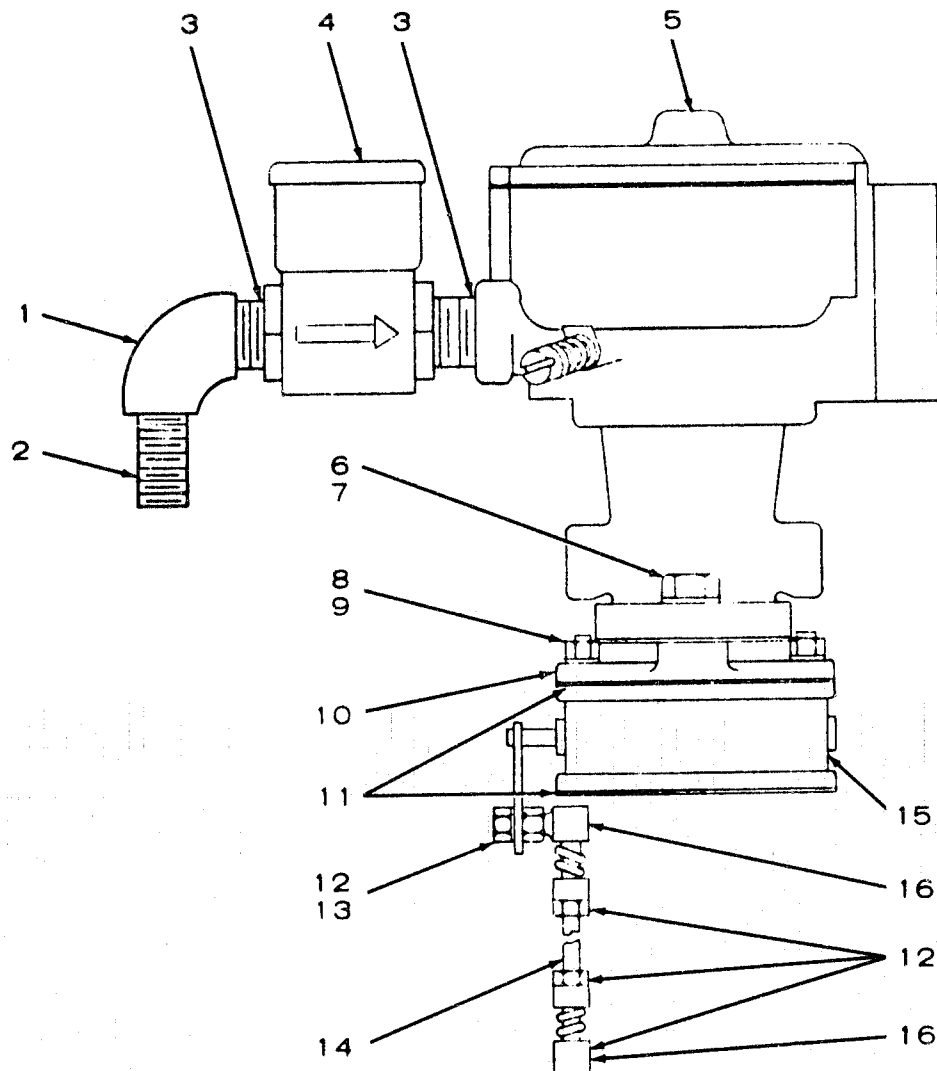
OPTIONAL CARBURETOR AND REGULATOR ASSEMBLY (LPG VAPOR)



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	148-0636	1	*Regulator, Natural Gas (Impco #T-30 Less Pressure Spring)
2	505-0129	1	Bushing, Reducing (3/4 x 1")
3	505-0102	2	Nipple, Close (3/4 x 1-3/8")
4	307-0312	1	Valve, Magnetic (3/4")
5	148-0592	1	*Carburetor - Natural Gas (Impco #200 with 1-3/4" Flange & 3-1/16" Air Horn)
6	800-0071	2	Screw, Cap - Hex Head (7/16-14 x 1")
7	850-0055	2	Washer, Lock - Spring (7/16")
8	110-0445	4	Nut, Hex (5/16-24)
9	850-0045	4	Washer, Lock - Spring (5/16")
10	145-0358	1	Adapter, Carburetor
11	145-0185	2	Gasket, Carburetor Flange
12	115-0025	4	Nut, Hex (1/4-28")
13	850-0040	1	Washer, Lock - Spring (1/4")
14	520-0517	1	Stud (1/4-28 x 7")
15	145-0410	1	Body Assembly, Throttle
16	150-0638	2	Joint, Ball (1/4-28")

* - For components contact your nearest Impco dealer or Impco Division, 16916 Gridley Place, Cerritos, California 90701.

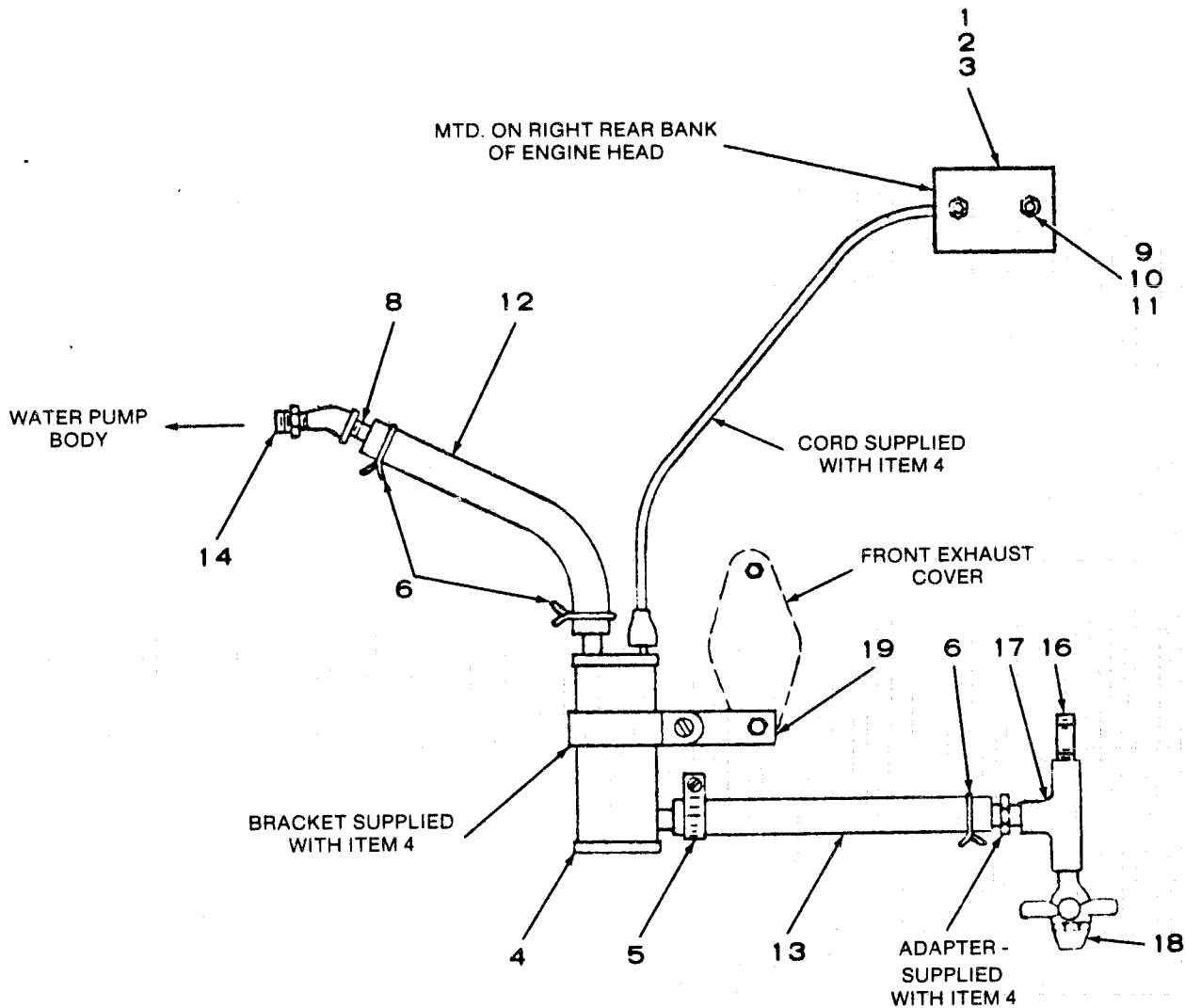
OPTIONAL CARBURETOR AND REGULATOR ASSEMBLY (LPG LIQUID)



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	505-0132	1	Elbow (3/4")
2	505-0324	1	Nipple, Half (3/4 x 2")
3	505-0102	2	Nipple, Close (3/4 x 1-3/8")
4	307-0312	1	Valve, Magnetic (3/4")
5	148-0592	1	*Carburetor, Natural Gas (Impco #200)
6	800-0071	2	Screw, Cap - Hex Head (7/16-14")
7	850-0055	2	Washer, Lock - Spring (7/16")
8	110-0445	4	Nut, Hex (5/16-24)
9	850-0045	4	Washer, Lock - Spring (5/16")
10	145-0358	1	Adapter, Carburetor
11	145-0185	2	Gasket, Carburetor Flange
12	115-0025	4	Nut, Hex (1/4-28")
13	850-0040	1	Washer, Lock - Spring (1/4")
14	520-0517	1	Stud (1/4-28 x 9-7/8")
15	145-0410	1	Body Assembly, Throttle
16	150-0638	2	Joint, Ball (1/4-28")

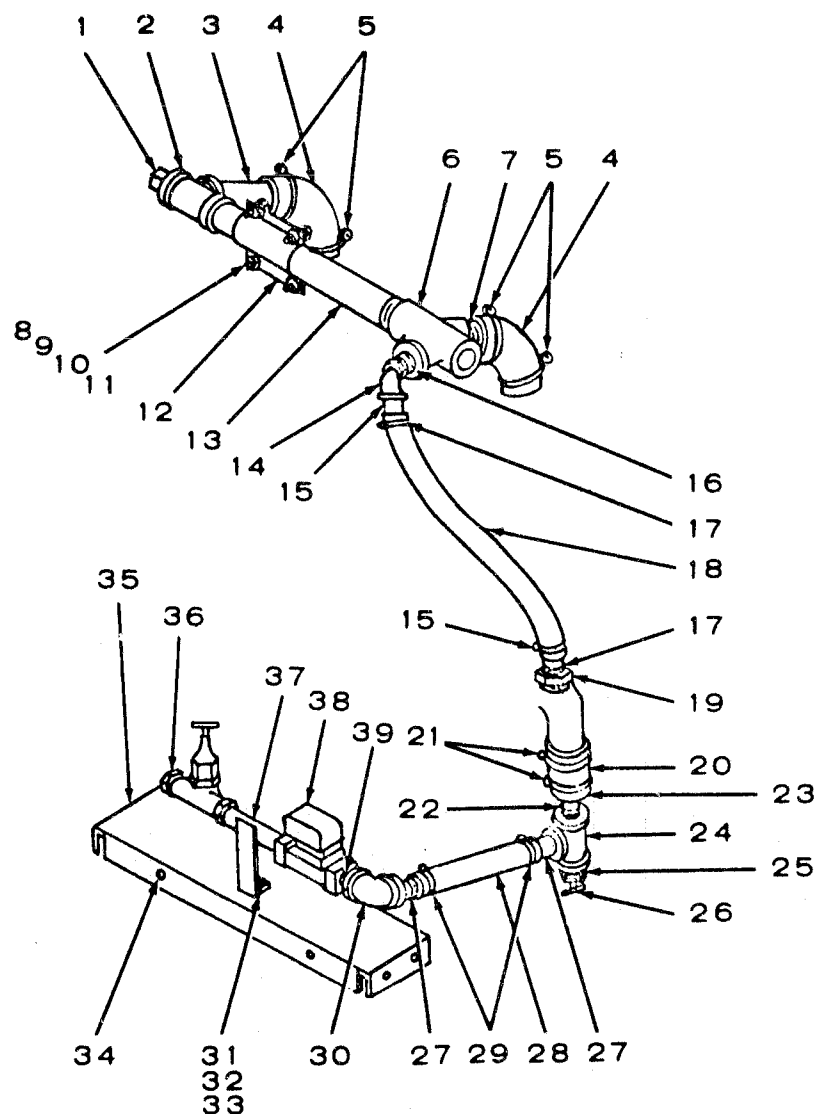
* - For components contact your nearest Impco dealer or Impco Division, 16916 Gridley Place, Cerritos, California 90701.

WATER JACKET HEATER (120 VOLTS) INSTALLATION PRIOR TO SERIAL #A780294689 DURING SPEC T



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	309-0106	1	Thermostat
2	333-0012	1	Box, Thermostat
3	333-0013	1	Cover, Thermostat Box
4	333-0052	1	Heater
5	503-0183	1	Clamp, Hose
6	503-0131	3	Clamp, Hose
8	505-0135	1	Nipple, Half (3/8 x 1-1/2")
9	520-0446	2	Stud
10	870-0053	2	Nut, Hex (#10-32)
11	850-0030	2	Washer, Lock - Spring (#10)
12		1	Hose - Order 12" of Bulk Hose #503-0386
13		1	Hose - Order 11" of Bulk Hose #503-0386
14	505-0019	1	Bushing, Reducer (1/2 x 3/8")
16	505-0101	1	Nipple, Close (1/4")
17	505-0184	1	Tee (1/4")
18	504-0003	1	Valve, Drain
19	130-0755	1	Bracket

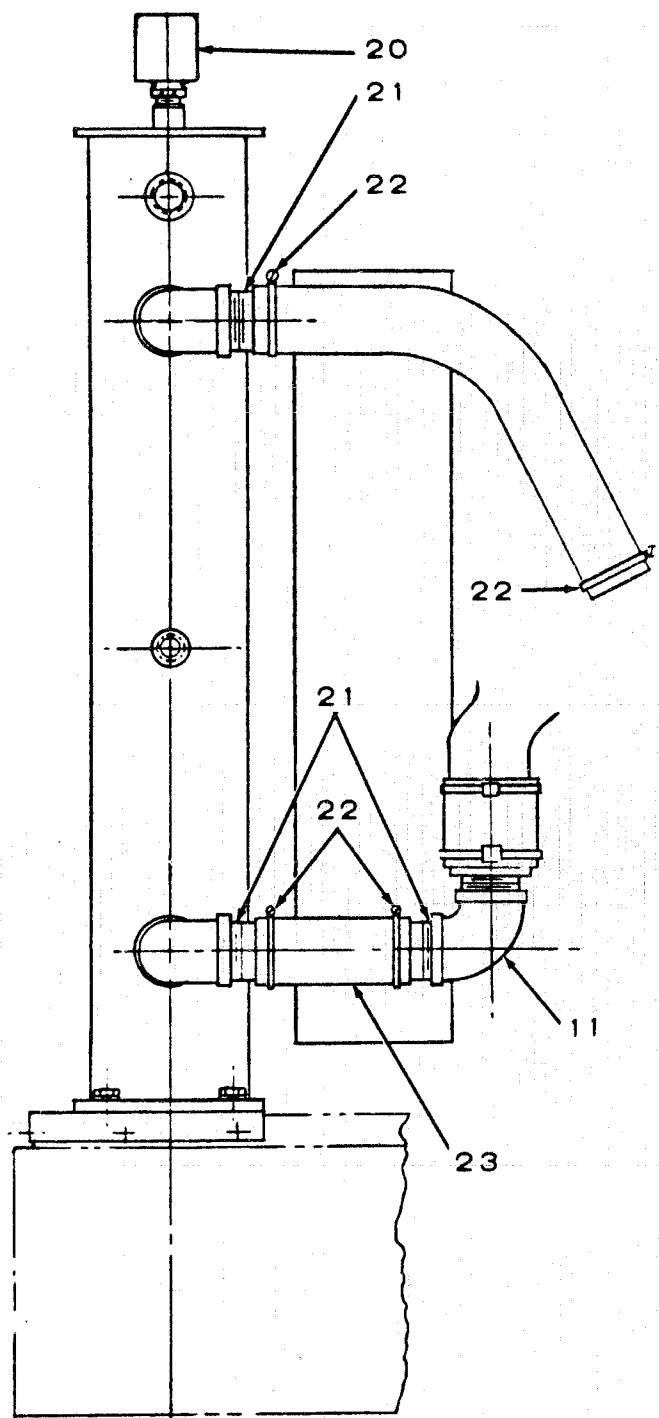
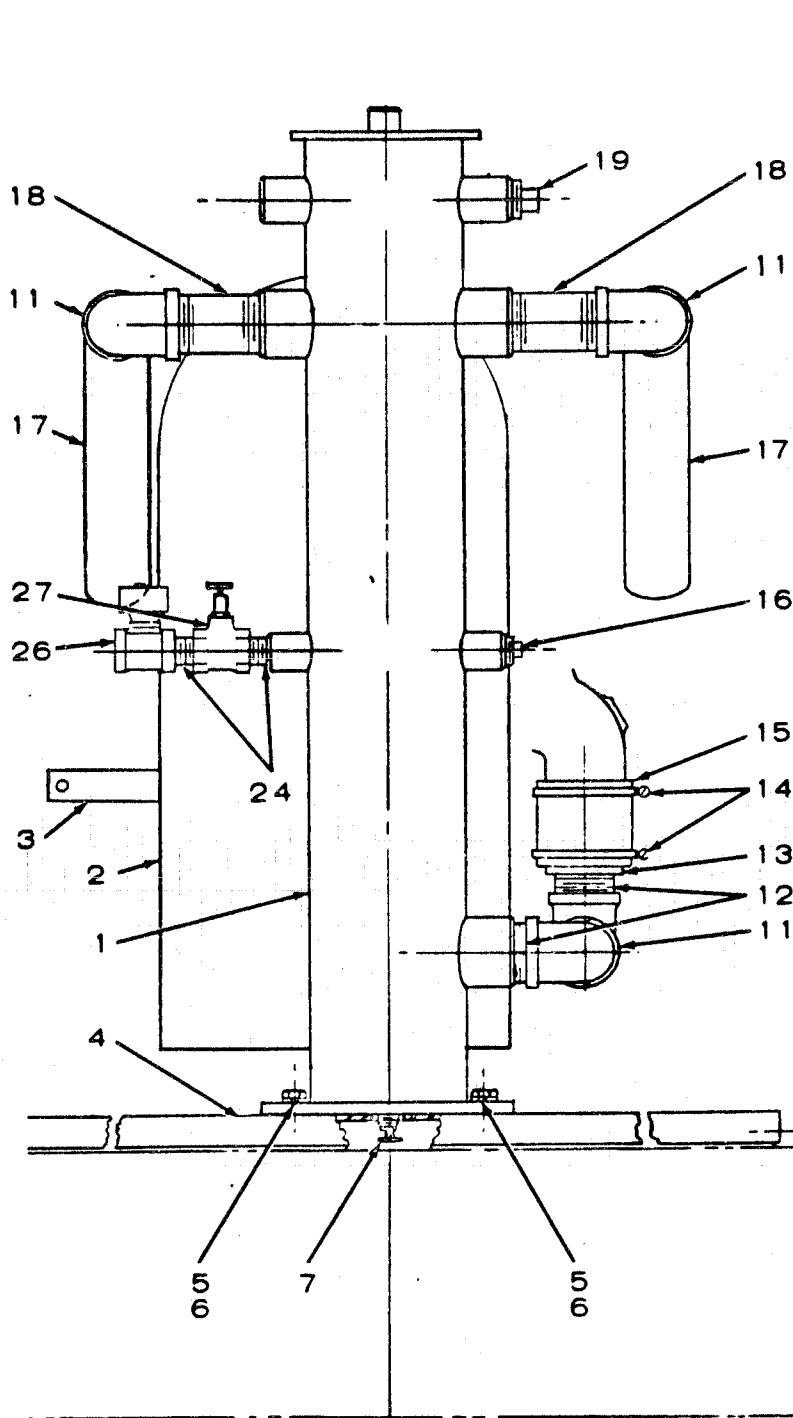
CITY WATER COOLED (UNHOUSED MODELS) INSTALLATION



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	505-0402	1	Plug, Square Head	22	505-0085	1	Nipple, Pipe (3/4 x 2")
2	505-0317	1	Tee, Pipe (1-1/2")	23	130-0452	1	Fitting, Water Inlet
3	505-0474	1	Nipple, Half (1-1/2 x 5")	24	505-0166	1	Tee, Pipe (3/4")
4	503-0364	2	Hose, Radiator	25	505-0131	1	Bushing, Reducer (3/4 x 3/8")
5	503-0365	4	Clamp, Hose	26	504-0028	1	Cock, Drain
6	505-0398	1	Tee, Side Outlet (1-1/2")	27	505-0324	2	Nipple, Half (3/4 x 2")
7	505-0272	1	Nipple, Half (1-1/2 x 4")	28		1	Hose - Order 8" of Bulk Hose #503-0249
8	800-0028	4	Screw, Cap - Hex Head (5/16-18 x 1")	29	503-0189	2	Clamp, Hose
9	862-0002	4	Nut, Hex (5/16-18)	30	505-0132	1	Elbow, Pipe (3/4 x 90°)
10	850-0045	4	Washer, Lock - Spring (5/16")	31	800-0023	2	Screw, Cap - Hex Head (1/4-20 x 3/8")
11	526-0115	4	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)	32	862-0001	2	Nut, Hex (1/4-20")
12	130-0488	1	Clamp, Pipe	33	850-0040	2	Washer, Lock - Spring (1/4")
13	505-0424	1	Nipple, Pipe (1-1/2 x 16-1/2")	34	821-0014	8	Screw, Cap - Locking Head (5/16-18 x 2")
14	505-0011	1	Elbow, Street (1/4")	35	130-0499	1	Bracket, Heat Exchanger
15	505-0010	2	Nipple, Half (1/4 x 1")	36	504-0046	1	Valve, Globe
16	505-0426	1	Bushing, Reducer (1-1/2 x 1/4")	37	110-0810	1	Bracket & Nipple
17	503-0032	2	Clamp, Hose	38	307-0835	1	Valve, Solenoid *
18		1	Hose - Order 16-1/4" of Bulk Hose #503-0110	39	505-0102	1	Nipple, Close (3/4")
19	505-0018	1	Bushing, Reducer (1/2 x 1/4")		130-0454	1	*Guard, Belt
20	503-0828	1	Hose		130-0455	1	*Bracket, Belt Guard
21	503-0354	2	Clamp, Hose				

* - Not shown in Illustration.

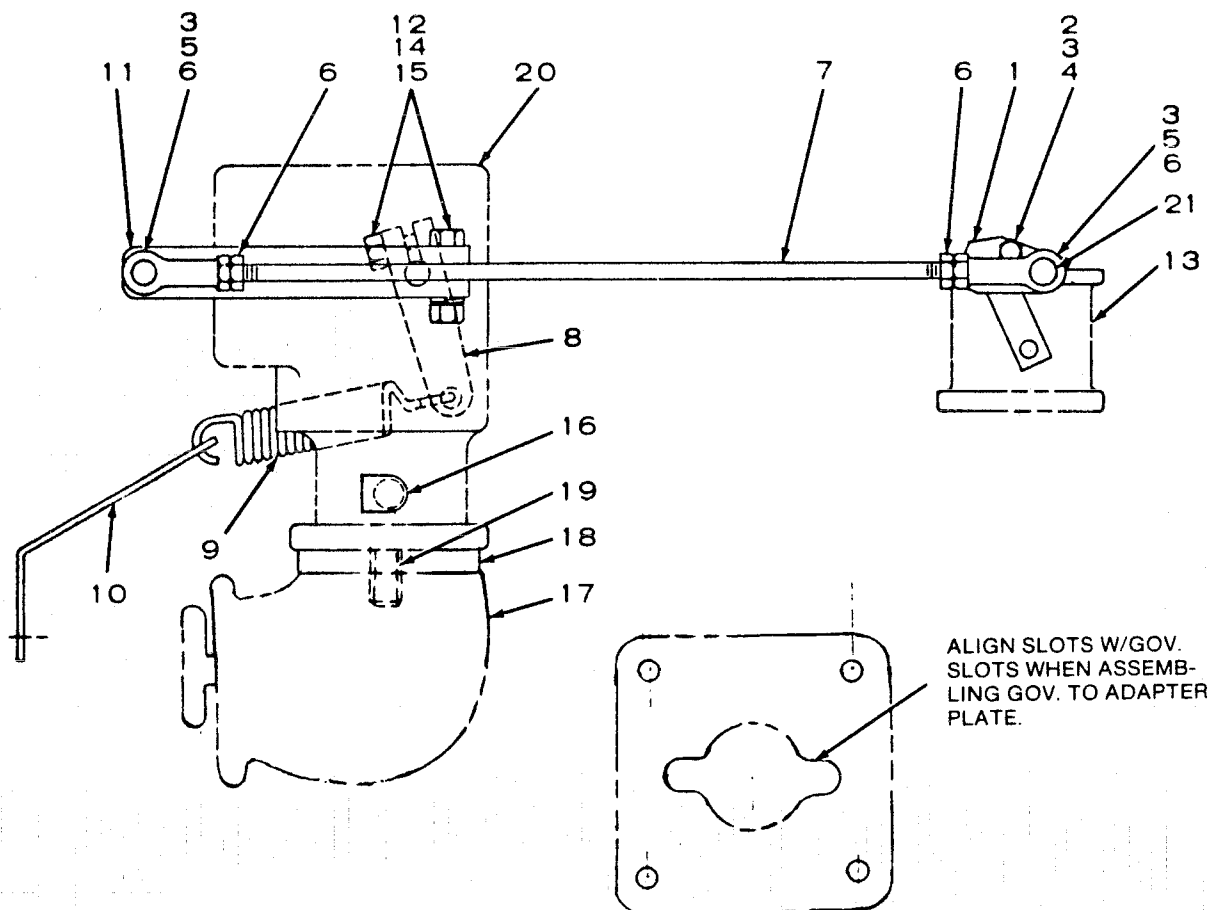
STANDPIPE INSTALLATION



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-0635	1	Standpipe
2	130-0454	1	Guard, Belt
3	130-0455	1	Bracket, Belt Guard
4	130-0636	1	Bracket, Standpipe Mounting
5	850-0050	4	Washer, Lock - Spring (3/16")
6	800-0050	4	Screw, Cap - Hex Head (3/8-16 x 1")
7	504-0028	1	Cock, Drain
11	505-0043	4	Elbow (1-1/2" x 90°)
12	505-0220	2	Nipple, Close (1-1/2 x 1-3/4")
13	130-0478	1	Fitting, Water Inlet
14	503-0354	2	Clamp, Hose
15		1	Hose - Order 3" of Bulk Hose #503-0357

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
16	505-0130	1	Plug, Square Head (3/4")
17	503-0332	2	Hose, Radiator Upper
18	505-0261	2	Nipple (1-1/2 x 4-1/2")
19	505-0140	1	Plug, Square Head (1")
20	504-0062	1	Valve, Vacuum Relief
21	505-0444	4	Nipple, Half (1-1/2 x 2-1/4")
22	503-0365	6	Clamp, Hose
23		1	Hose - Order 7" of Bulk Hose #503-0411
24	505-0102	2	Nipple, Close (3/4")
25	307-0835	1	Valve
26	504-0046	1	Valve, Lockshield

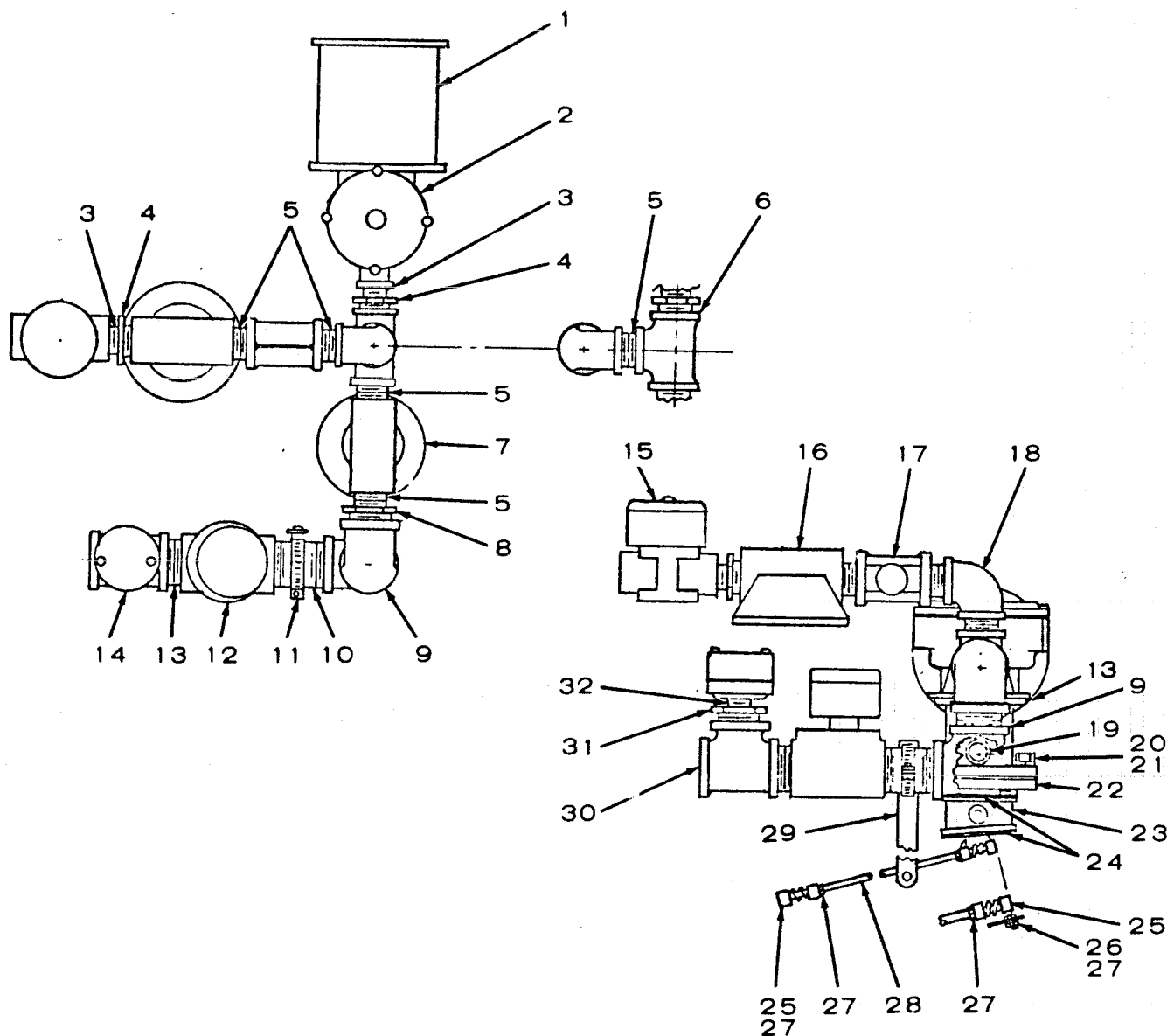
OPTIONAL HYDRAULIC GOVERNOR INSTALLATION



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	145-0375	1	Link, Throttle Lever Extension
2	800-0003	2	Screw, Cap - Hex Head (1/4-20 x 1/2")
3	850-0040	4	Washer, Lock - Spring (1/4")
4	862-0001	2	Nut, Hex (1/4-20")
5	150-1036	2	Joint, Governor Ball
6	115-0025	4	Nut, Hex (1/4-28")
7	520-0515	1	Stud, Governor Control
8	151-0332	1	Arm, Governor Spring Mounting
9	150-0698	1	Spring, Governor
10	151-0325	1	Bracket, Governor Spring Mounting
11	151-0331	1	Arm, Governor
12	800-0031	2	Screw, Cap - Hex Head (5/16-18 x 1-1/2")
13	145-0441	1	Body, Throttle
14	850-0045	2	Washer, Lock - Spring (5/16")
15	862-0015	2	Nut, Hex (5/16-18")
16	502-0246	1	Elbow, 3/8" Inverted 1/8" Pipe
17	151-0296	1	Drive Kit, Governor
18	151-0299	1	Spacer, Drive
19	151-0300	1	Coupling, Drive
20	151-0319	1	Governor, Hydraulic
21	812-0155	1	Screw, Machine - Roundhead (1/4-20 x 1-1/4")
	502-0106	1	*Connector, 3/8" Inverted 1/8" Pipe
	504-0077	1	*Valve, Check
	120-0654	1	*Line, Oil

* - Not shown in Illustration.

OPTIONAL NATURAL GAS AND LPG VAPOR (AUTOMATIC CHANGEOVER) INSTALLATION

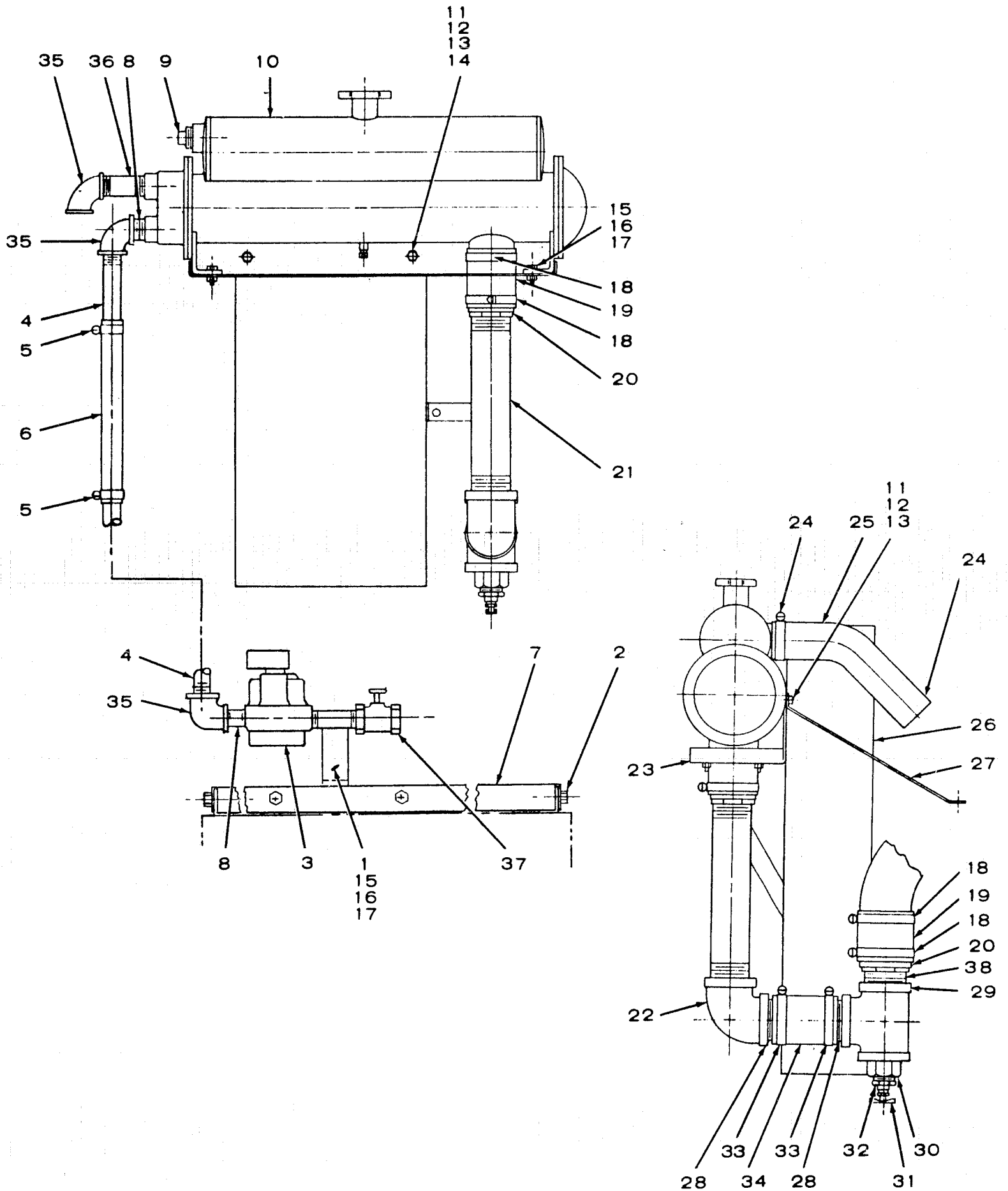


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	140-0851	1	Air Cleaner
2	148-0592	1	*Carburetor (Impco #200 with 1-3/4" Flange & 3-1/16" Air Hose)
3	505-0102	2	Nipple, Close (3/4")
4	505-0129	2	Bushing, Reducer (1 x 3/4")
5	505-0004	5	Nipple, Close (1")
6	505-0304	1	Tee (1"), Pipe
7	148-0601	1	*Valve, Pressure Reduction (Impco #T-30)
8	505-0023	1	Bushing, Reducer (1-1/4" x 1")
9	505-0042	2	Elbow (1-1/4 x 90°), Pipe
10	505-0258	1	Nipple (1-1/4 x 3"), Pipe
11	331-0101	1	Hanger (1-1/4")
12	307-0837	1	Valve, Solenoid
13	505-0177	2	Nipple, Close (1-1/4")
14	148-0627	1	*Switch, Pressure (Impco #AP-153-R33)
15	307-0312	1	Valve, Magnetic
16	148-0636	1	*Valve, Pressure Reduction (Impco #T-30 Less Pressure Spring)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
17	148-0626	1	*Valve, Adjustment (Impco #AB1-32 - 1")
18	505-0041	1	Elbow (1 x 90°), Pipe
19	148-0620	1	Collar, Shaft
20	850-0055	2	Washer, Lock - Spring (7/16")
21	800-0071	2	Screw, Cap - Hex Head (7/16-14 x 1")
22	145-0358	1	Adapter, Carburetor
23	145-0410	1	Body Assembly, Throttle
24	145-0185	2	Gasket
25	150-0638	2	Joint, Ball
26	850-0040	1	Washer, Lock - Spring (1/4")
27	115-0025	4	Nut, Hex (1/4-28)
28	520-0517	1	Stud
29	191-0101	1	Strap, Generator Adjusting
30	505-0249	1	Tee (1-1/4")
31	505-0766	1	Bushing, Reducer (1-1/4 x 1")
32	505-0099	1	Nipple, Close (1/4")

* - For components contact your nearest Impco dealer or Impco Division, 16916 Gridley Place, Cerritos, California 90701

HEAT EXCHANGER INSTALLATION

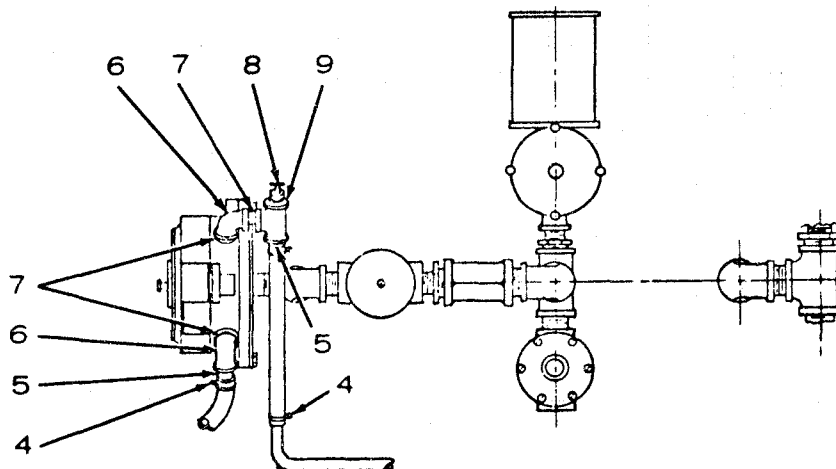
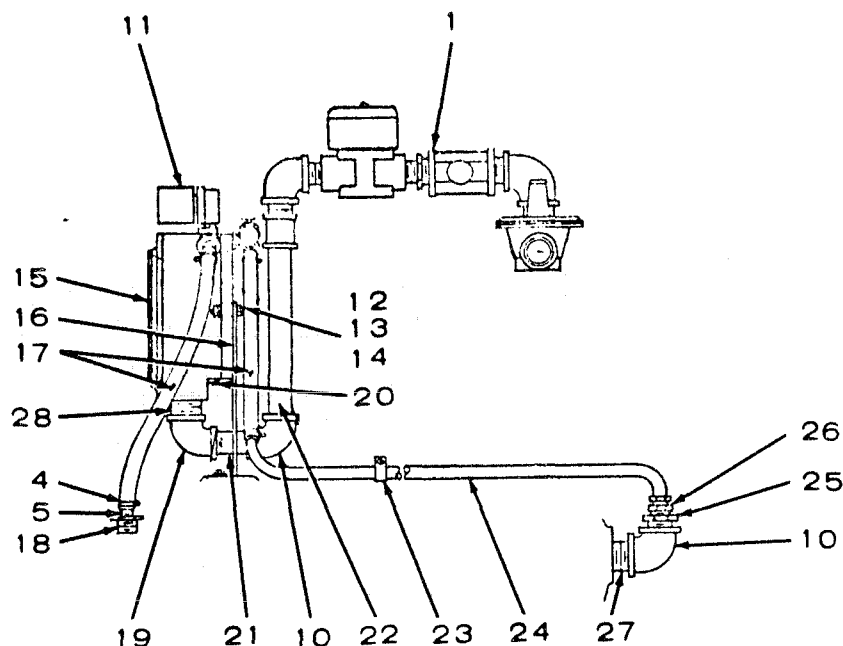


HEAT EXCHANGER INSTALLATION

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-0797	1	Bracket and Nipple
2	821-0014	6	Screw, Cap - Locking Head (5/16-18 x 1/2")
3	307-1139	1	Valve, Solenoid
4	505-0089	2	Nipple, Half
5	503-0004	2	Clamp, Hose
6		1	Hose (12" of Bulk Hose 503-0361)
7	130-0499	1	Bracket, Heat Exchanger
8	505-0004	2	Nipple, Close
9	505-0140	1	Plug, Pipe
10	130-0753	1	Exchanger, Heat
11	800-0050	5	Screw, Cap - Hex Head (3/8-16 x 1")
12	850-0050	5	Washer, Lock - Spring (3/8")
13	862-0003	5	Nut, Hex (3/8-16)
14	526-0029	4	Washer, Flat (25/64" ID x 7/8" OD x 1/16" Thk)
15	800-0007	6	Screw, Cap - Hex Head (1/4-20 x 1")
16	850-0004	6	Washer, Lock - Spring (1/4")
17	862-0001	6	Nut, Hex (1/4-20)
18	503-0354	4	Clamp, Hose

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
19		2	Hose (Order 4" of Bulk Hose 503-0357)
20	130-0478	2	Fitting, Water Inlet
21	505-0095	1	Nipple
22	505-0043	1	Elbow
23	130-0752	1	Bracket, Heat Exchanger
24	503-0311	2	Clamp, Hose
25	503-0332	2	Hose, Radiator
26	130-0454	1	Guard, Belt
27	130-0751	1	Brace
28	505-0385	2	Nipple, Half
29	505-0317	1	Tee, Pipe
30	505-0399	1	Bushing, Reducer
31	504-0028	1	Drain, Cock
32	505-0019	1	Bushing, Reducer
33	503-0365	2	Clamp, Hose
34		1	Hose (Order 4" of Bulk Hose 503-0411)
35	505-0041	3	Elbow
36	505-0086	1	Nipple
37	504-0090	1	Valve, Globe
38	505-0220	1	Nipple, Close
	130-0455	1	Bracket, Belt Guard
	821-0004	2	Screw, Cap - Locking Head (10-32 x 5/16")

OPTIONAL NATURAL GAS AND LPG LIQUID (MANUAL CHANGEOVER) INSTALLATION

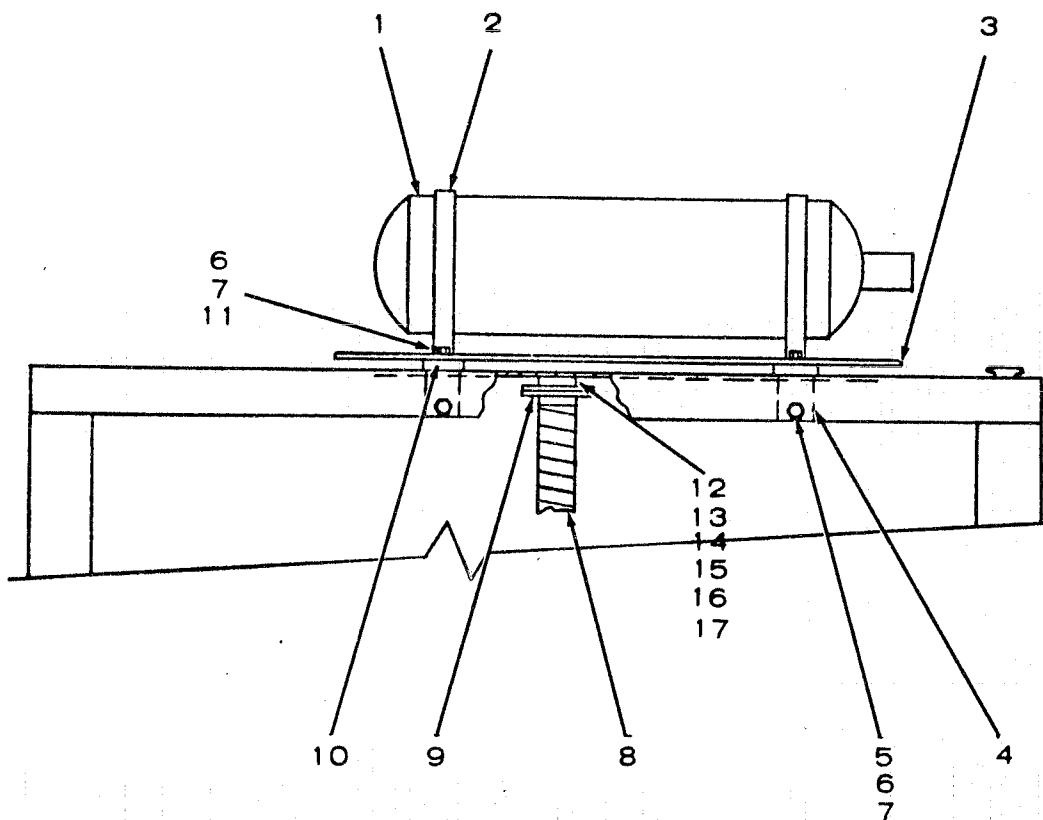


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	148-0728	1	Carburetor and Valve Assembly
2	503-0324	2	Nipple, Half (3/4" x 2")
3	505-0102	1	Nipple, Close (3/4")
4	503-0189	4	Clamp, Hose
5	505-0135	3	Nipple (3/8 x 1/2"), Half
6	505-0039	2	Elbow (3/8"), Pipe
7	505-0101	3	Nipple, Close (3/8")
8	504-0028	1	Cock, Drain (3/8")
9	505-0060	1	Tee, Pipe (3/8")
10	505-0132	2	Elbow (3/4"), Pipe
11	307-0268	1	Valve, Solenoid
12	800-0009	2	Screw, Cap - Hex Head (1/4-20 x 1-1/2")
13	850-0040	2	Washer, Lock - Spring (1/4")
14	862-0001	2	Nut, Hex (1/4-20)
15	148-0625	1	*Converter Assembly, Gas (Impco Model EB)
16	148-0631	1	Bracket, Vaporizer

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
17		1	Hose, Order 42" of Bulk Hose #503-0386
18	505-0019	1	Bushing, Reducer (1/2 x 3/8")
19	505-0356	1	Elbow, Reducer (1 x 3/4")
20	504-0005	1	Cock, Drain (1/8")
21	505-0084	1	Nipple (3/4 x 2-1/2"), Pipe
22	503-0249	1	Hose (3/4" x 8-3/4")
23	148-0274	1	Bracket, Hose
24	131-0192	1	Line, Water
25	505-0021	1	Bushing, Reducer (3/4 x 1/2")
26	502-0227	1	Connector, Inverted Male
27	505-0071	1	Nipple (3/4 x 2"), Pipe
28	505-0107	1	Nipple, Short (1 x 2")

* - For components contact your nearest Impco dealer or Impco Division, 16916 Gridley Place, Cerritos, California 90701.

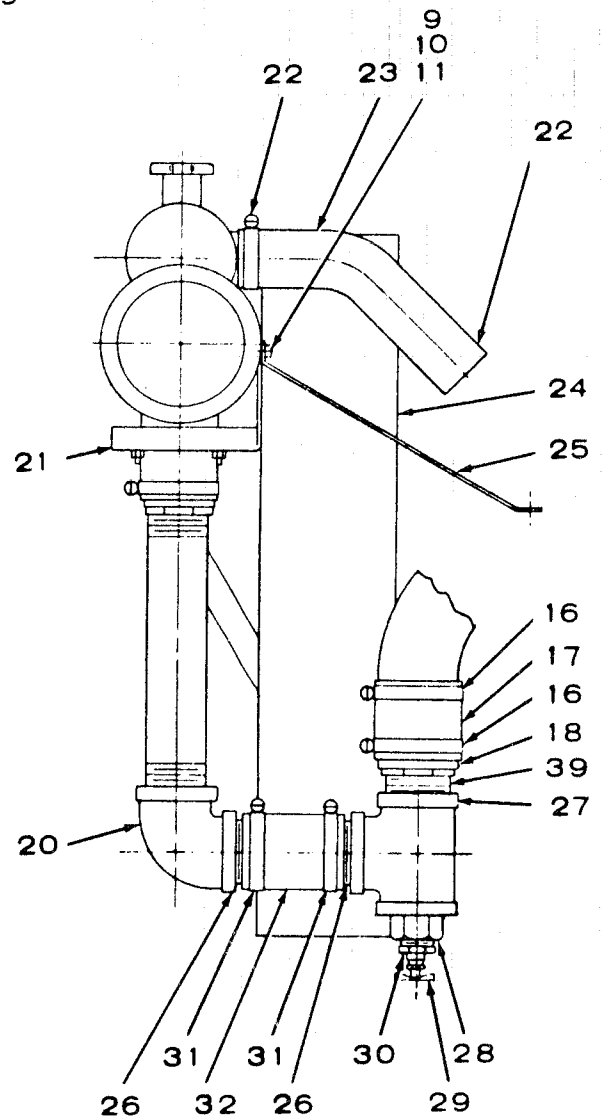
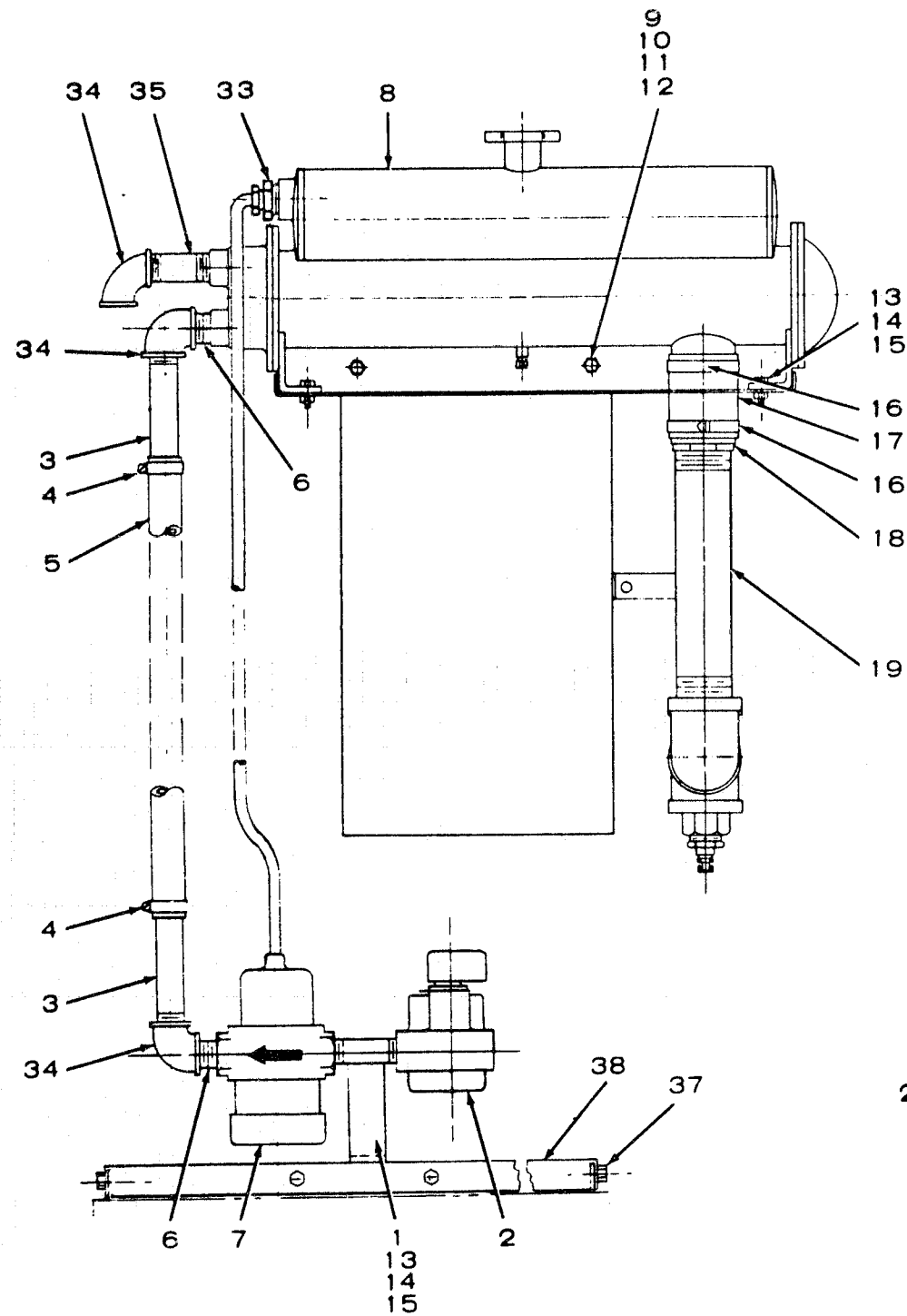
MUFFLER INSTALLATION



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	155-0989	1	Muffler, Exhaust
2	140-0757	2	Clamp
3	155-0997	1	Shield, Muffler Heat
4	155-0789	2	Support, Muffler
5	800-0026	6	Screw, Cap - Hex Head (5/16-18 x 3/4")
6	850-0045	10	Washer, Lock - Spring (5/16")
7	862-0002	10	Nut, Hex (5/16-18)
8	155-1592	1	Tube, Exhaust
9	505-0702	1	Union, Pipe
10	155-1430	4	Spacer
11	800-0028	4	Screw, Cap - Hex Head (5/16-18 x 1")
12	895-0159	1	Asbestos
13	870-0048	1	Nut, Hex (5/16-18)
14	800-0037	1	Screw, Cap - Hex Head (5/16-18 x 3")
15	815-0105	1	Screw, Machine - Socket Head (#10-32 x 1-1/4")
16	870-0188	1	Nut, Hex (10-32)
17	155-1422	1	Shield, Rain

HEAT EXCHANGER WITH MARSH REGULATOR INSTALLATION

NOTE: REMOVE THERMOSTATS FROM ENGINE



HEAT EXCHANGER WITH MARSH REGULATOR INSTALLATION

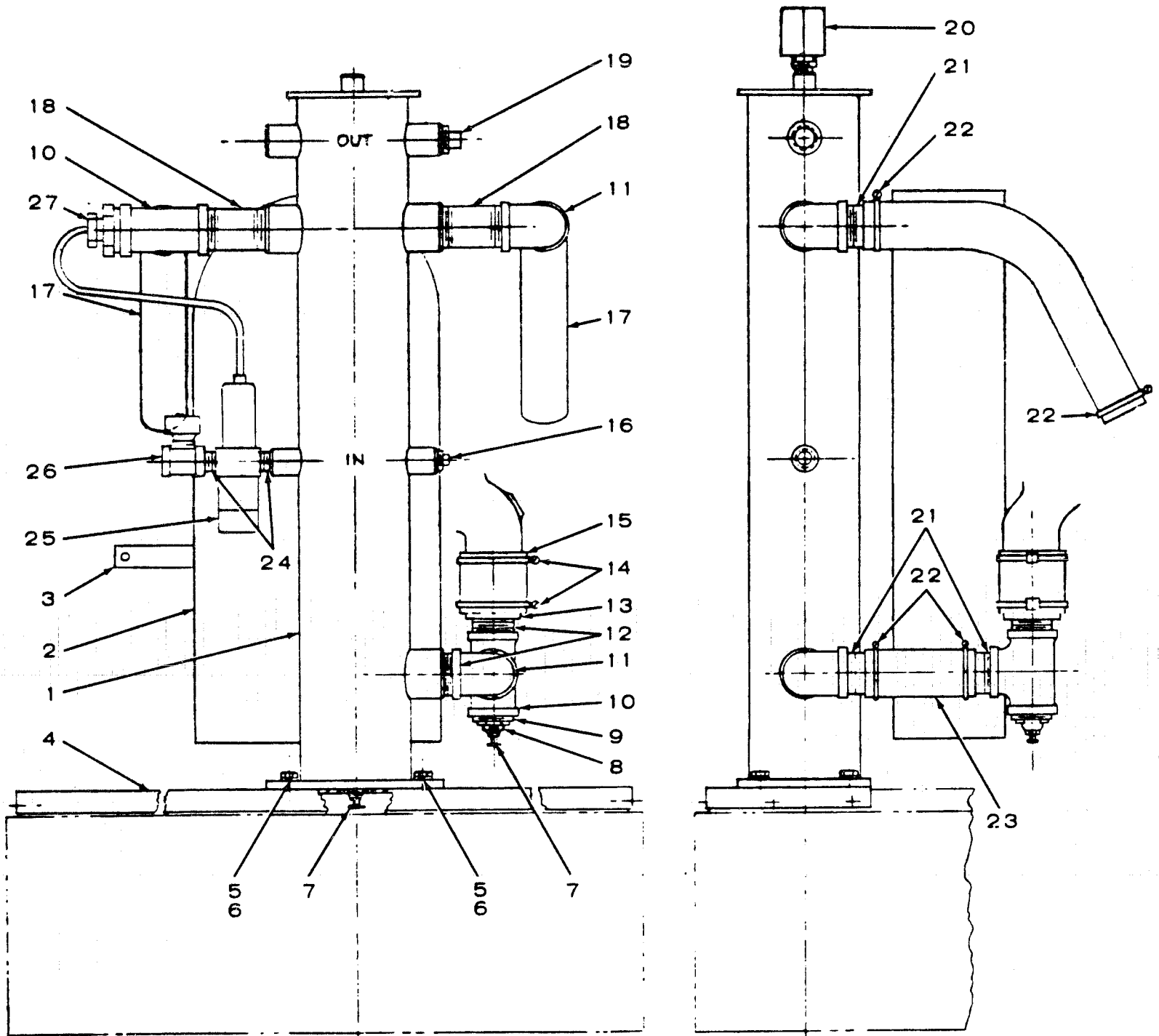
NOTE: REMOVE THERMOSTATS FROM ENGINE

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-0797	1	Bracket and Nipple
2	307-1139	1	Valve, Solenoid
3	505-0089	2	Nipple, Half
4	503-0004	2	Clamp, Hose
5	503-0361	1	Hose
6	505-0004	2	Nipple, Close
7	309-0242	1	Valve, Water Temperature Control
8	130-0753	1	Heat Exchanger
9	800-0050	5	Screw, Cap - Hex Head (3/8-16 x 1")
10	850-0050	5	Washer, Lock - Spring (3/8")
11	862-0003	5	Nut, Hex (3/8-16)
12	526-0029	4	Washer, Flat (25/64" ID x 7/8" OD x 1/16" Thk)
13	800-0007	6	Screw, Cap - Hex Head (1/4-20 x 1")
14	850-0004	6	Washer, Lock - Spring (1/4")
15	862-0001	6	Nut, Hex (1/4-20)
16	503-0354	4	Clamp, Hose
17		2	Hose (Order 4" of Bulk Hose 503-0357)
18	130-0478	2	Fitting, Water Inlet
19	505-0095	1	Nipple
20	505-0043	1	Elbow

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
21	130-0752	1	Bracket, Heat Exchanger
22	503-0311	2	Clamp, Hose
23	503-0332	2	Hose, Radiator (Cut to Size)
24	130-0454	1	Guard, Belt
25	130-0751	1	Brace
26	505-0385	2	Nipple, Half
27	505-0317	1	Tee
28	505-0399	1	Bushing, Reducer
29	504-0028	1	Drain, Cock
30	505-0019	1	Bushing, Reducer
31	503-0365	2	Clamp, Hose
32		1	Hose (Order 4" of Bulk Hose 503-0411)
33	505-0129	1	Bushing, Reducer
34	505-0041	3	Elbow
35	505-0086	1	Nipple
36	505-0219	1	Nipple
37	821-0014	6	Screw, Cap - Locking Head (5/16-18 x 1/2")
38	130-0499	1	Bracket, Heat Exchanger
39	505-0220	1	Nipple, Close
	130-0455	1	Bracket, Belt Guard
	821-0004	2	Screw, Cap - Locking Head (#10-32 x 5/16")

STANDPIPE WITH MARSH REGULATOR INSTALLATION

NOTE: REMOVE THERMOSTATS

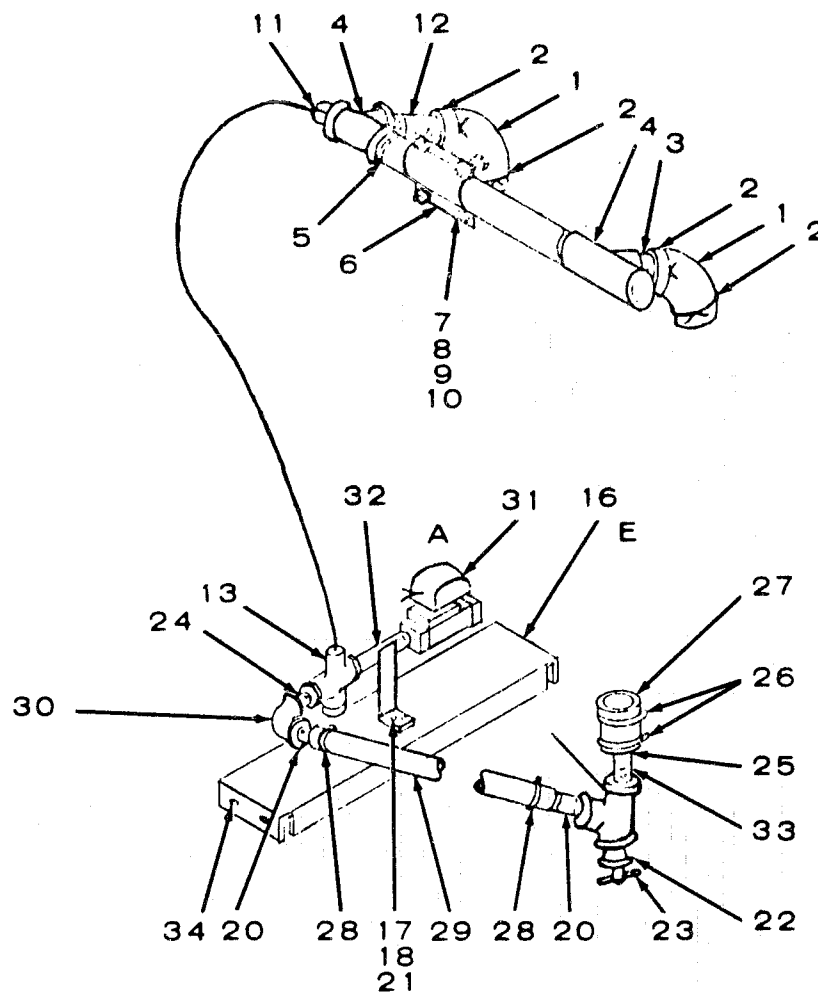


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-0635	1	Standpipe
2	130-0454	1	Guard, Belt
3	130-0455	1	Bracket, Belt Guard Mounting
4	130-0636	1	Bracket, Standpipe Mounting
5	850-0050	4	Washer, Lock - Spring (3/8")
6	800-0050	4	Screw, Cap - Hex Head (3/8-16 x 1")
7	504-0028	2	Cock, Drain
8	505-0019	1	Bushing, Reducer
9	505-0399	1	Bushing, Reducer
10	505-0317	2	Tee, Pipe
11	505-0043	2	Elbow
12	505-0220	2	Nipple, Close
13	130-0478	1	Filter, Water Inlet
14	503-0354	2	Clamp, Hose

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
15		1	Hose (3" of Bulk Hose 503-0357)
16	505-0130	1	Plug, Square
17	503-0332	2	Hose, Radiator
18	505-0261	2	Nipple
19	505-0140	1	Plug, Square
20	504-0028	1	Valve, Vacuum Relief
21	505-0043	4	Nipple, Half
22	503-0365	6	Clamp, Hose
23		1	Hose (7" of Bulk Hose 503-0411)
24	505-0102	2	Nipple, Close
25	309-0241	1	Valve, Water Temperature Control
26	307-0835	1	Valve, Solenoid
27	505-0289	1	Bushing, Reducer
	821-0004	2	Screw, Cap - Locking Head (10-32 x 5/16")

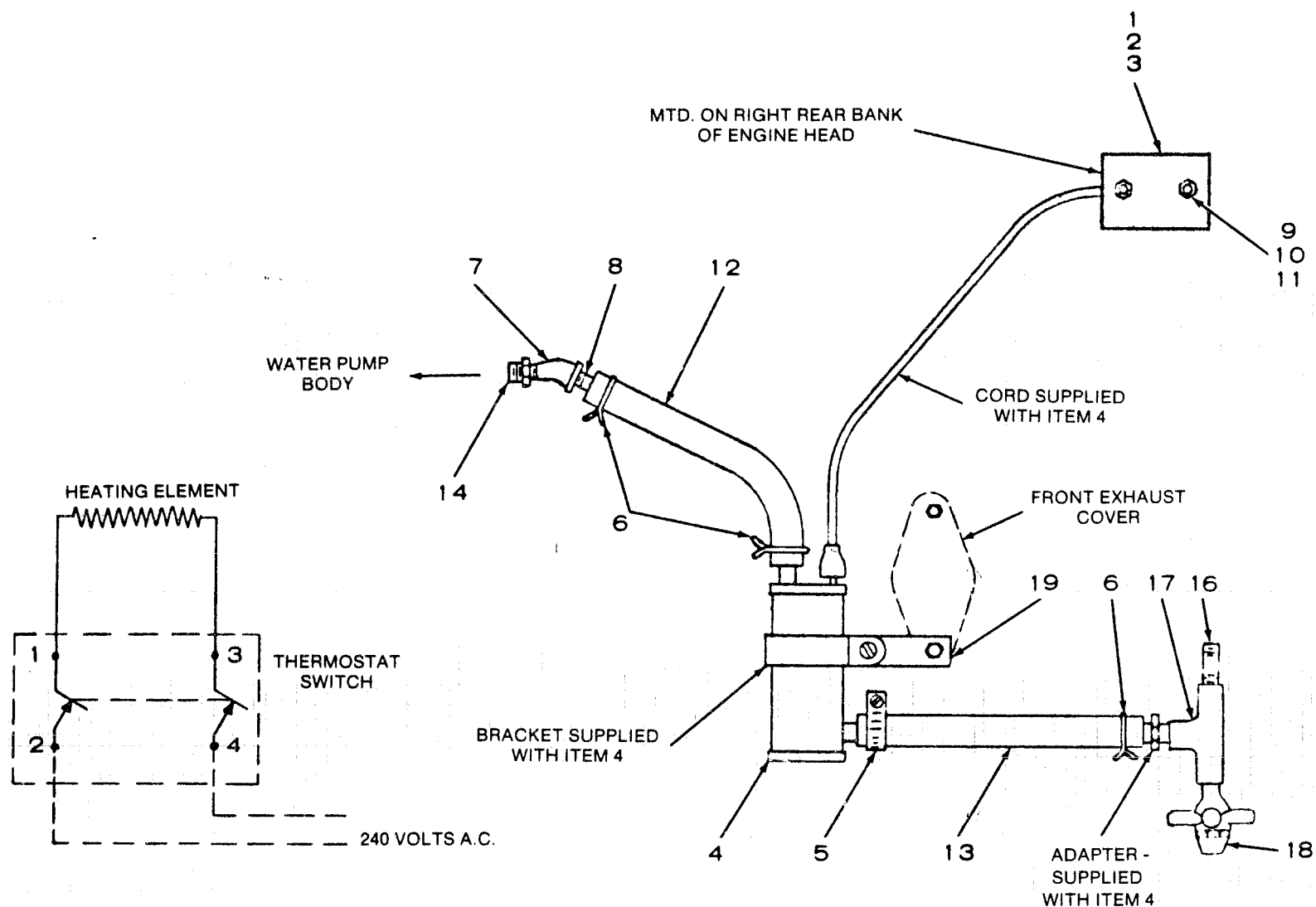
CITY WATER COOLED WITH MARSH REGULATOR (UNHOUSED MODELS) INSTALLATION

NOTE: REMOVE THERMOSTATS FROM ENGINE



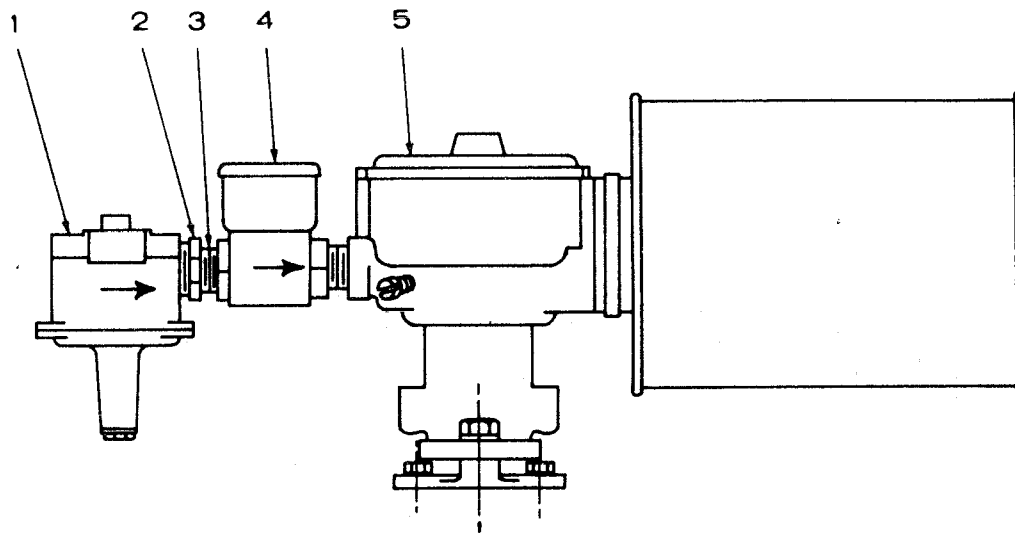
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	503-0364	2	Hose, Radiator	19	800-0023	2	Screw, Cap - Hex Head (1/4-20 x 1-3/8")
2	503-0365	4	Clamp, Hose	20	505-0131	1	Bushing, Reducer
3	505-0272	1	Nipple, Half	21	505-0028	1	Cock, Drain
4	505-0317	2	Tee, Pipe	22	505-0102	1	Nipple, Close
5	505-0424	1	Nipple	23	130-0452	1	Fitting, Water Inlet
6	130-0488	1	Support, Pipe	24	503-0354	2	Clamp, Hose
7	800-0028	4	Screw, Cap - Hex Head (5/16-18 x 1")	25		1	Hose (3" of Bulk Hose 503-0357)
8	862-0002	4	Nut, Hex (5/16-18)	26	503-0189	2	Clamp, Hose
9	850-0045	4	Washer, Lock - Spring (5/16")	27		1	Hose (9-1/2" of Bulk Hose 503-0249)
10	526-0115	4	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)	28	505-0132	1	Elbow
11	505-0289	1	Bushing, Reducer	29	307-0835	1	Valve, Solenoid
12	505-0274	1	Nipple, Half	30	110-0810	1	Nipple and Bracket
13	309-0241	1	Valve, Temperature Control	31	505-0085	1	Nipple
14	130-0499	1	Bracket, Support	32	821-0014	6	Screw, Cap - Hex Head (5/16-18 x 1/2")
15	850-0040	2	Washer, Lock - Spring (1/4")		130-0454	1	Guard, Belt
16	862-0001	2	Nut, Hex (1/4-20)		130-0455	1	Bracket, Guard Mounting
17	505-0166	1	Tee, Pipe		821-0004	2	Screw, Cap - Hex Head (#10-32 x 5/16")
18	505-0324	2	Nipple, Half				

WATER JACKET HEATER (240 VOLTS) INSTALLATION



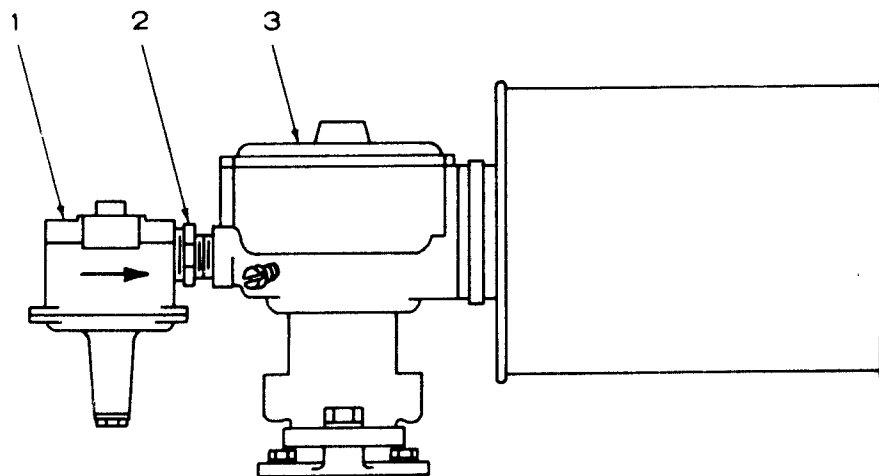
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	309-0256	1	Thermostat
2	333-0057	1	Box, Thermostat
3	333-0056	1	Cover, Thermostat Box
4	333-0073	1	Heater
5	503-0183	1	Clamp, Hose
6	503-0131	3	Clamp, Hose
7	505-0119	1	Elbow, Stud (3/8" x 45°)
8	505-0135	1	Nipple, Half (3/8 x 1-1/2")
9	332-0672	2	Stud
10	870-0053	2	Nut, Hex (#10-32)
11	850-0030	2	Washer, Lock - Spring (#10)
12		1	Hose, Order 8" of Bulk Hose #503-0386
13		1	Hose, Order 11" of Bulk Hose #503-0386
14	505-0019	1	Bushing, Reducer (1/2 x 3/8")
16	505-0101	1	Nipple, Close (1/4")
17	505-0184	1	Tee (1/4")
18	504-0003	1	Valve, Drain
19	130-0755	1	Bracket

OPTIONAL LPG VAPOR CARBURETOR INSTALLATION



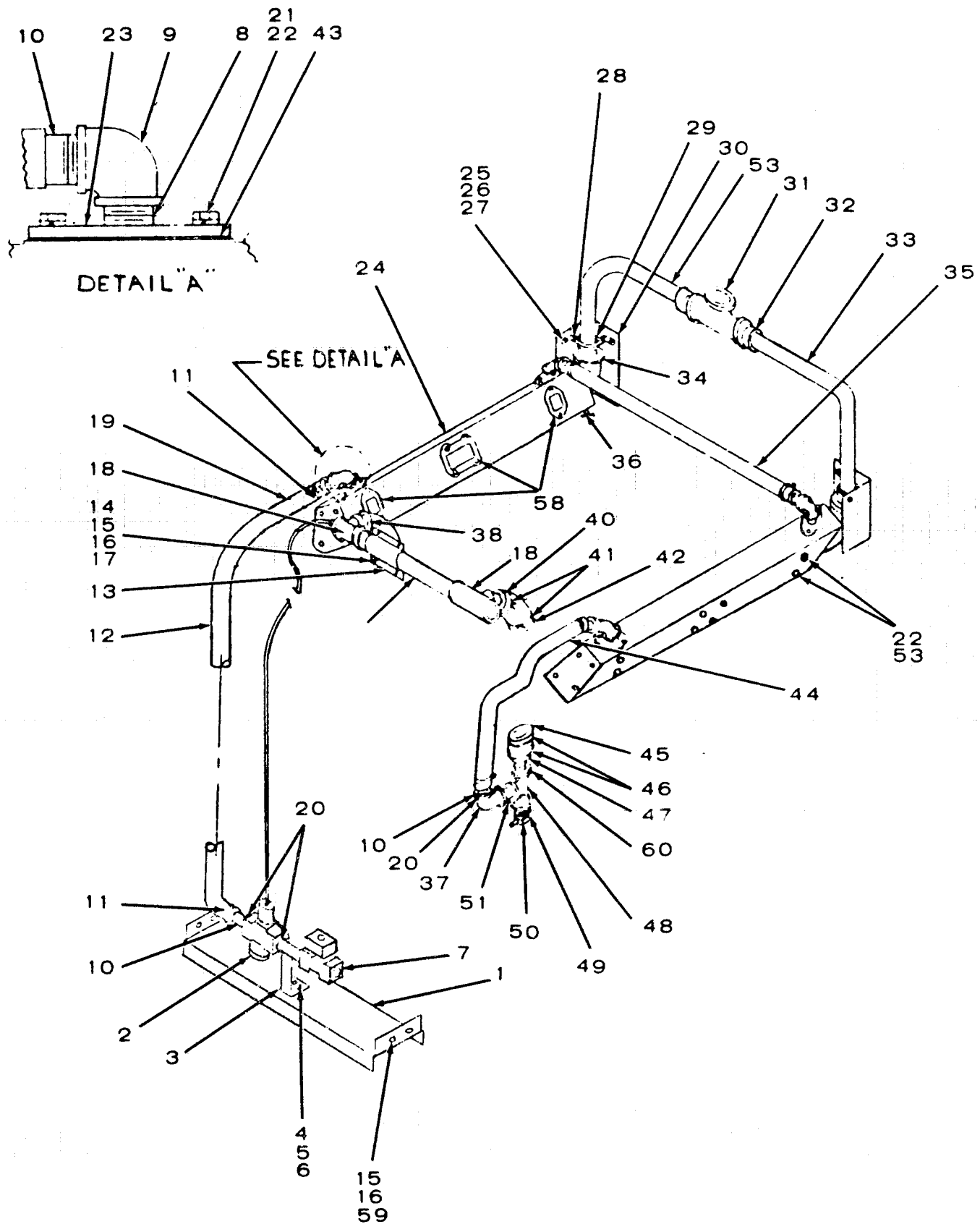
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	148-0636	1	Regulator - LPG Vapor
2	505-0129	1	Bushing, Reducer
3	505-0102	1	Nipple, Close
4	307-0312	1	Valve, Magnetic
5		1	Carburetor & Air Cleaner (See Separate Installation #179-0522)

OPTIONAL GAS CARBURETOR INSTALLATION



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	148-0601	1	Regulator, Gas
2	505-0129	1	Bushing, Reducer
3		1	Carburetor and Air Cleaner Assembly (See Separate Installation 179-0522 for Complete Breakdown of Components)

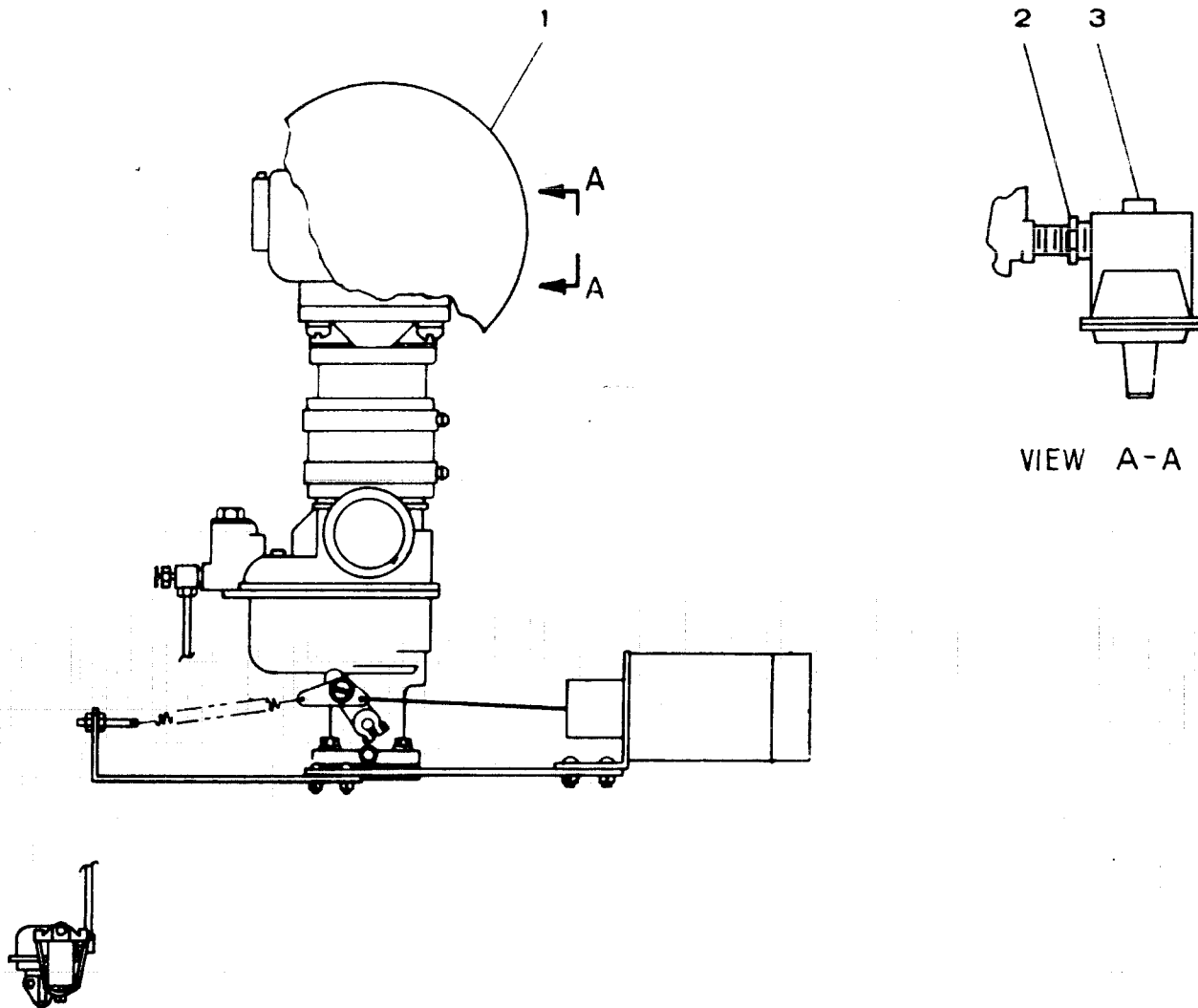
CITY WATER COOLED WITH WATER COOLED EXHAUST MANIFOLD AND MARSH REGULATOR (HOUSED MODELS) INSTALLATION



CITY WATER COOLED WITH WATER COOLED EXHAUST MANIFOLD AND MARSH REGULATOR (HOUSED MODELS) INSTALLATION

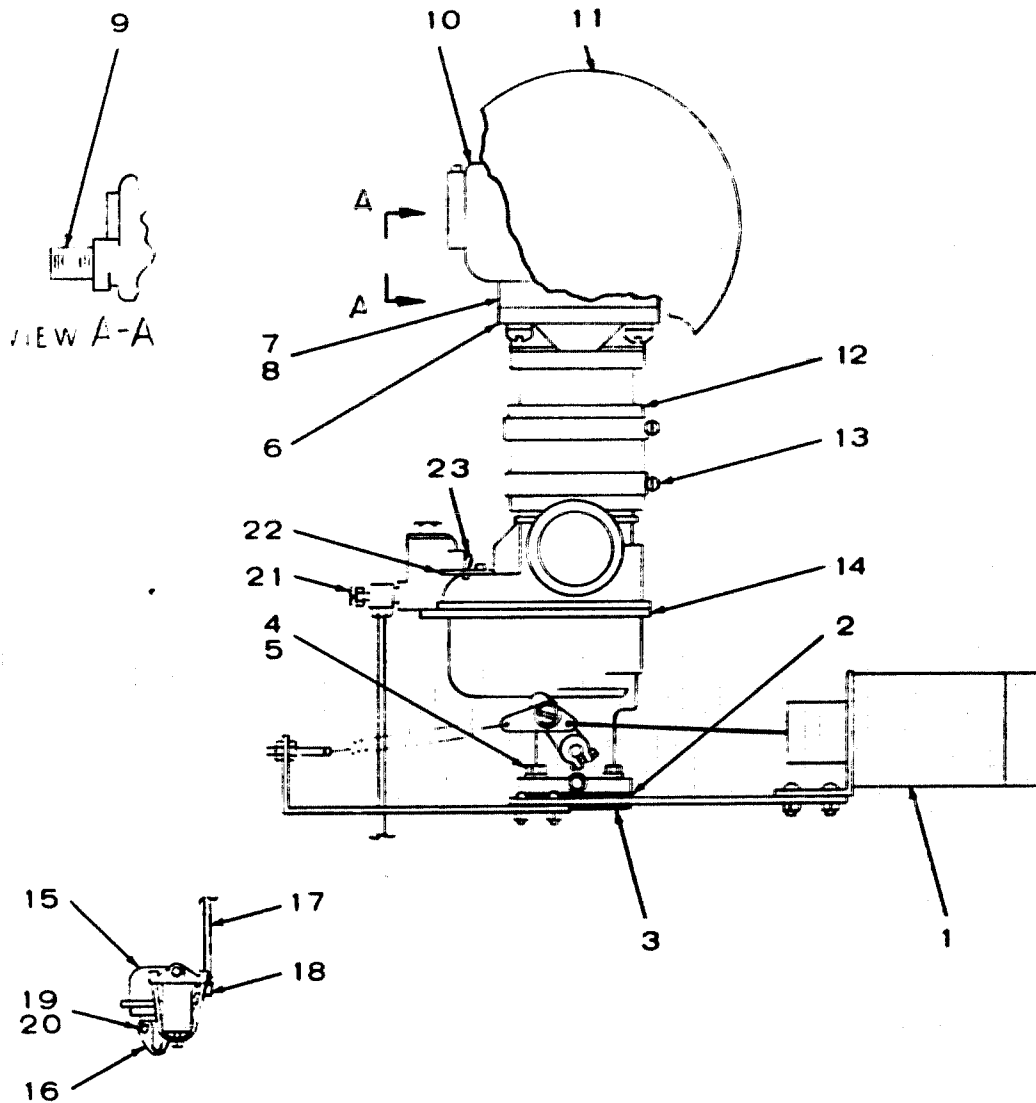
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-0828	1	Bracket, Support	29	155-0661	2	Band, Shield Mounting
2	309-0241	1	Valve, Water Temperature Control	30	155-0659	2	Shield, Exhaust Header
3	110-0526	1	Nipple & Bracket Assembly	31	505-0373	1	Tee, Reducer (2-1/2 x 2-1/2 x 3")
4	800-0007	2	Screw, Cap - Hex Head (1/4-20 x 1")	32	155-0615	1	Nipple, Half
5	862-0001	2	Nut, Hex (1/4-20)	33	155-1047	1	Tube Assembly, Exhaust
6	850-0040	2	Washer, Lock - Spring (1/4")	34	505-0216	2	Elbow, Street (2-1/2")
7	307-0833	1	Valve, Solenoid	35		1	Hose, Order 38" of Bulk Hose #503-0386
8	505-0100	5	Nipple, Close (1/2")	36	504-0005	2	Cock, Drain
9	505-0040	4	Elbow (1/2" x 90°)	37	505-0132	1	Elbow (3/4" x 90°)
10	505-0185	6	Nipple, Half (1/2 x 1-1/2")	38	505-0474	1	Nipple, Half (1-1/2 x 5")
11	503-0189	6	Clamp, Hose	40	505-0272	1	Nipple, Half (1-1/2 x 4")
12		1	Hose, Order 23" of Bulk Hose #503-0386	41	503-0365	4	Clamp, Hose
13	130-0488	1	Support, Pipe	42	503-0364	2	Hose
14	800-0028	4	Screw, Cap - Hex Head (5/16-18 x 1")	43	145-0178	4	Gasket, Flange
15	862-0002	8	Nut, Hex (5/16-18)	44		1	Hose, Order 20" of Bulk Hose #503-0386
16	850-0045	10	Washer, Lock - Spring (5/16")	45		1	Hose, Order 3" of Bulk Hose #503-0357
17	526-0115	4	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)	46	503-0354	2	Clamp, Hose
18	505-0317	2	Tee (1-1/2")	47	130-0452	1	Fitting, Water Inlet
19	505-0289	1	Bushing, Reducer (1-1/2 x 3/4")	48	505-0166	1	Tee (3/4")
20	505-0021	2	Bushing (3/4 x 1/2")	49	505-0131	1	Bushing (3/4 x 3/8")
21	800-0050	8	Screw, Cap - Hex Head (3/8-16 x 1")	50	504-0028	1	Cock, Drain
22	850-0050	24	Washer, Lock - Spring (3/8")	51	505-0084	1	Nipple (3/4 x 2-1/2")
23	154-0611	4	Flange, Water Inlet	52	505-0424	1	Nipple (1-1/2 x 16-1/2")
24	154-1245	2	Manifold, Water Cooled	53	155-1048	1	Tube Assembly, Exhaust
25	870-0053	8	Nut, Hex (#10-32)	54	505-0057	2	Plug (1/8")
26	813-0102	10	Screw, Machine - Roundhead (10-32 x 5/8")	55	130-0454	1	Guard, Belt
27	850-0030	10	Washer, Lock - Spring (#10)	56	130-0455	1	Bracket, Guard Mounting
28	155-0660	2	Bracket, Exhaust Shield Mounting	57	104-0091	16	Nut (3/8-24")
				58	154-0592	2	Gasket Set, Manifold
				59	800-0026	6	Screw, Cap - Hex Head (5/16-18 x 3/4") - Coil Mounting
				60	505-0102	1	Nipple, Close (3/4")

OPTIONAL LPG AND GASOLINE CARBURETOR INSTALLATION



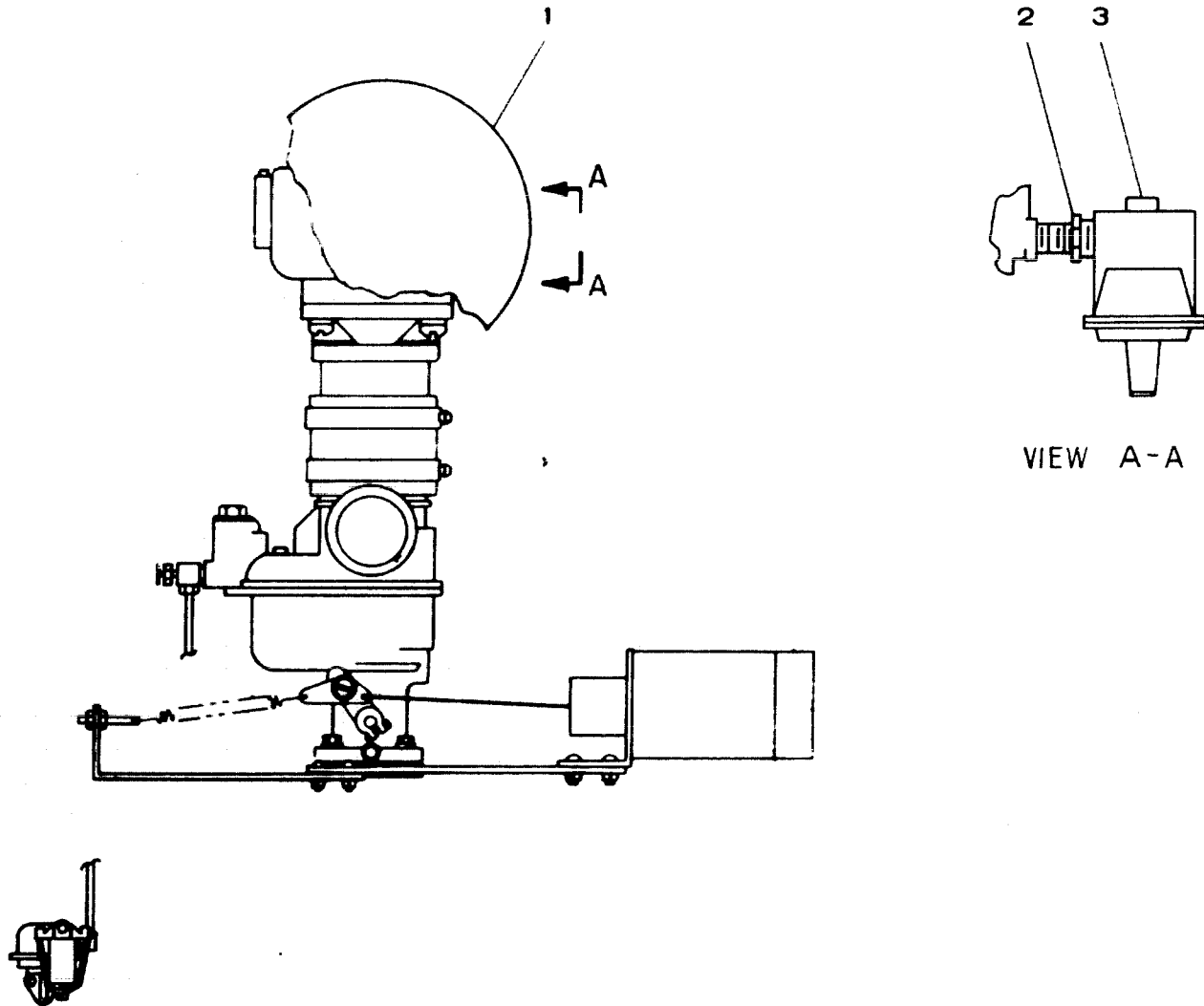
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1		1	Carburetor and Mixer Assembly (See Separate Installation 179-0520 for Complete Breakdown of Components)
2	505-0129	1	Bushing, Reducer
3	148-0601	1	Regulator, Natural Gas

OPTIONAL CARBURETOR AND MIXER



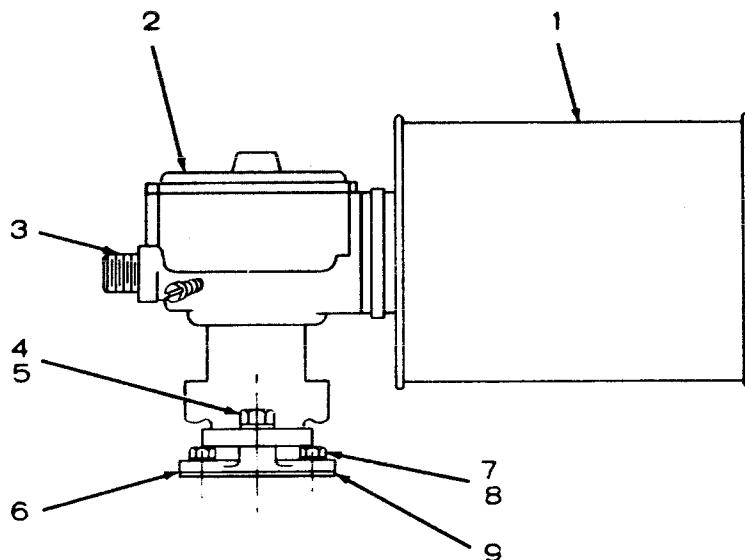
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1		1	Anti Dieseling Assembly (See Separate Illustration for 145-0458 for Complete Breakdown)	13	503-0354	2	Clamp
2	145-0185	1	Gasket, Carburetor Flange	14	141-0825	1	Carburetor (Includes Mounting Gasket)
3	145-0189	2	Gasket, Carburetor Flange	15	149-0730	1	Pump, Fuel (Includes Mounting Gasket)
4	110-0445	4	Nut, Hex (5/16-24)	16	149-0736	1	Gasket, Fuel Pump
5	850-0045	4	Washer, Lock - Spring (5/16")	17	159-0685	1	Line, Fuel
6	145-0396	1	Adapter, Carburetor	18	502-0004	1	Elbow, Fuel Pump
7		1	Gasket (Supplied with Mixer)	19	800-0051	2	Screw, Cap - Hex Head (3/8-16 x 1-1/4")
8		4	Screw (Supplied with Mixer)	20	850-0050	2	Washer, Lock - Spring (3/8")
9	505-0102	1	Nipple, Close	21	504-0085	1	Valve, Fuel Shut Off
10	148-0598	1	Mixer, Carburetor	22	308-0150	1	Plate, Switch Mounting
11	140-0851	1	Cleaner, Air	23	308-0005	1	Switch, Toggle (SPDT)
12	503-0550	1	Adapter, Hose				

OPTIONAL GAS-GASOLINE CARBURETOR INSTALLATIONS



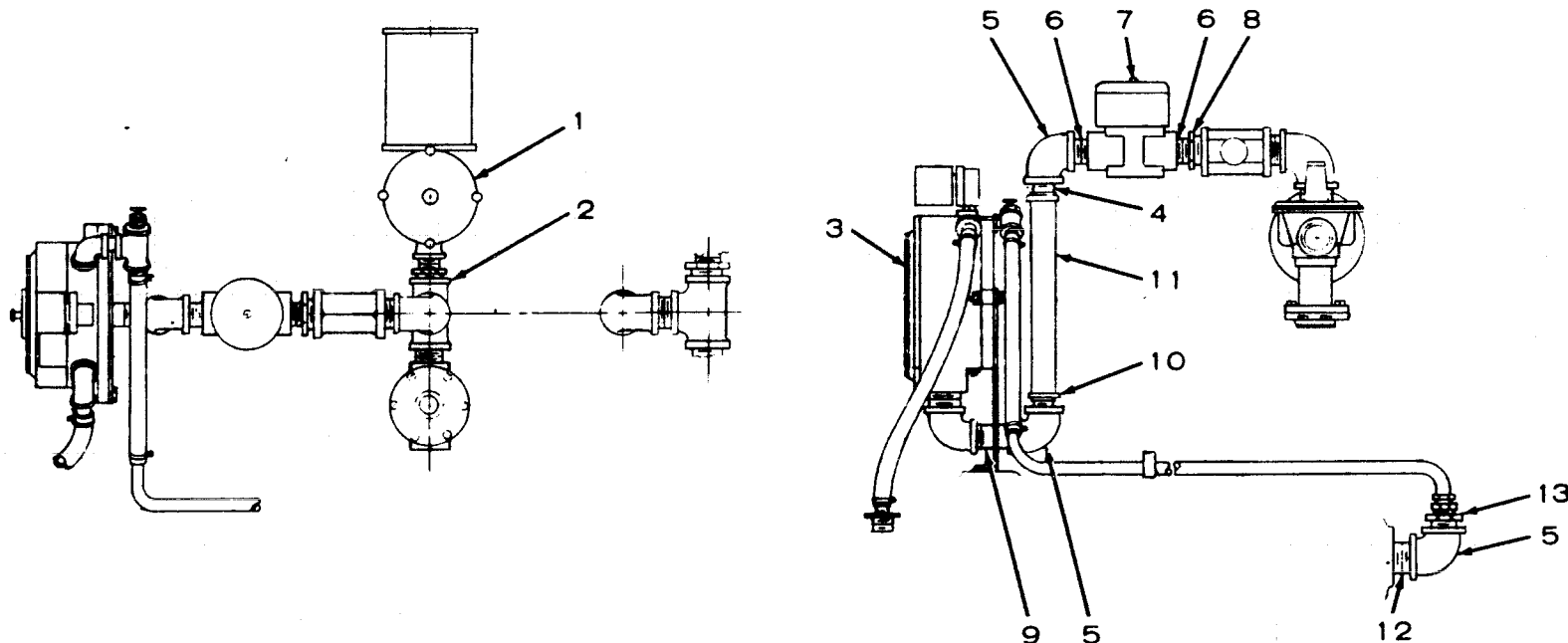
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1		1	Carburetor and Mixer Assembly (See Separate Installation 179-0520 for Complete Breakdown of Components)
2	505-0129	1	Bushing, Reducer
3	148-0636	1	Regulator, LPG

OPTIONAL CARBURETOR AND AIR CLEANER GAS



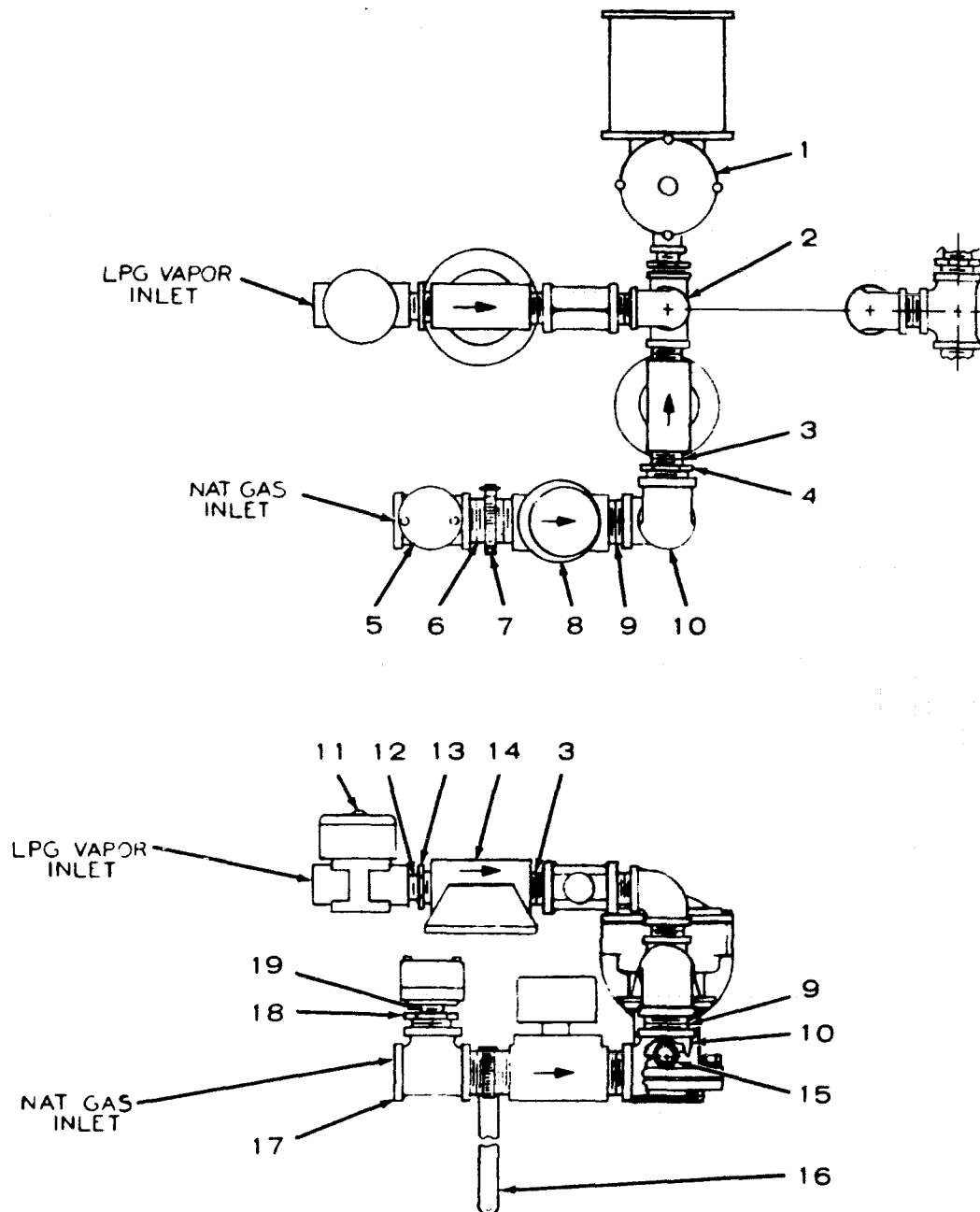
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	140-0851	1	Cleaner, Air
2	140-0592	1	Carburetor - Gas
3	505-0102	1	Nipple, Close
4	800-0071	2	Screw, Cap - Hex Head (7/16-14 x 1")
5	850-0055	2	Washer, Lock - Spring (7/16")
6	145-0358	1	Adapter, Carburetor
7	110-0445	4	Nut, Hex (5/16-24)
8	850-0045	4	Washer, Lock - Spring (5/16")
9	145-0185	2	Gasket, Carburetor

OPTIONAL DUAL FUEL INSTALLATION



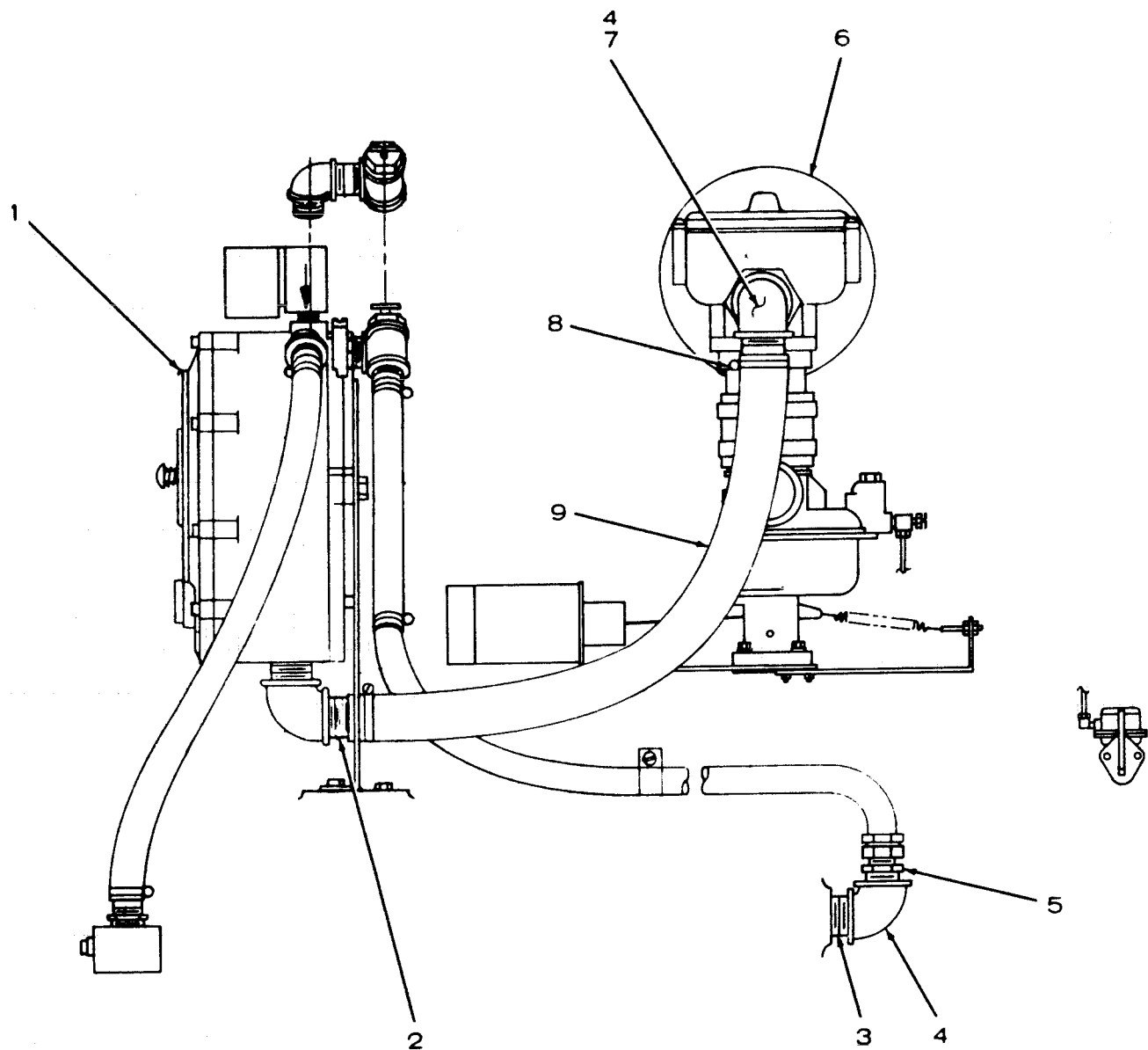
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1		1	Carburetor and Air Cleaner Assembly (See Separate Installation 179-0522 for Complete Breakdown of Components)
2		1	Valve and Regulator Assembly (See Separate Installation 148-0832 for Complete Breakdown of Components)
3		1	Vaporizer Assembly (See Separate Installation 148-0833 for Complete Breakdown of Components)
4	505-0324	2	Nipple, Half
5	505-0132	3	Elbow, Pipe
6	505-0102	2	Nipple, Close
7	307-0312	1	Valve, Solenoid
8	505-0129	1	Bushing, Reducer
9	505-0084	1	Nipple, Pipe
10	503-0189	2	Clamp, Hose
11	503-0848	1	Hose, Heater
12	505-0071	1	Nipple, Pipe
13	505-0021	1	Bushing, Reducer

OPTIONAL DUAL FUEL INSTALLATIONS — LPG AND GAS CONVERSION —



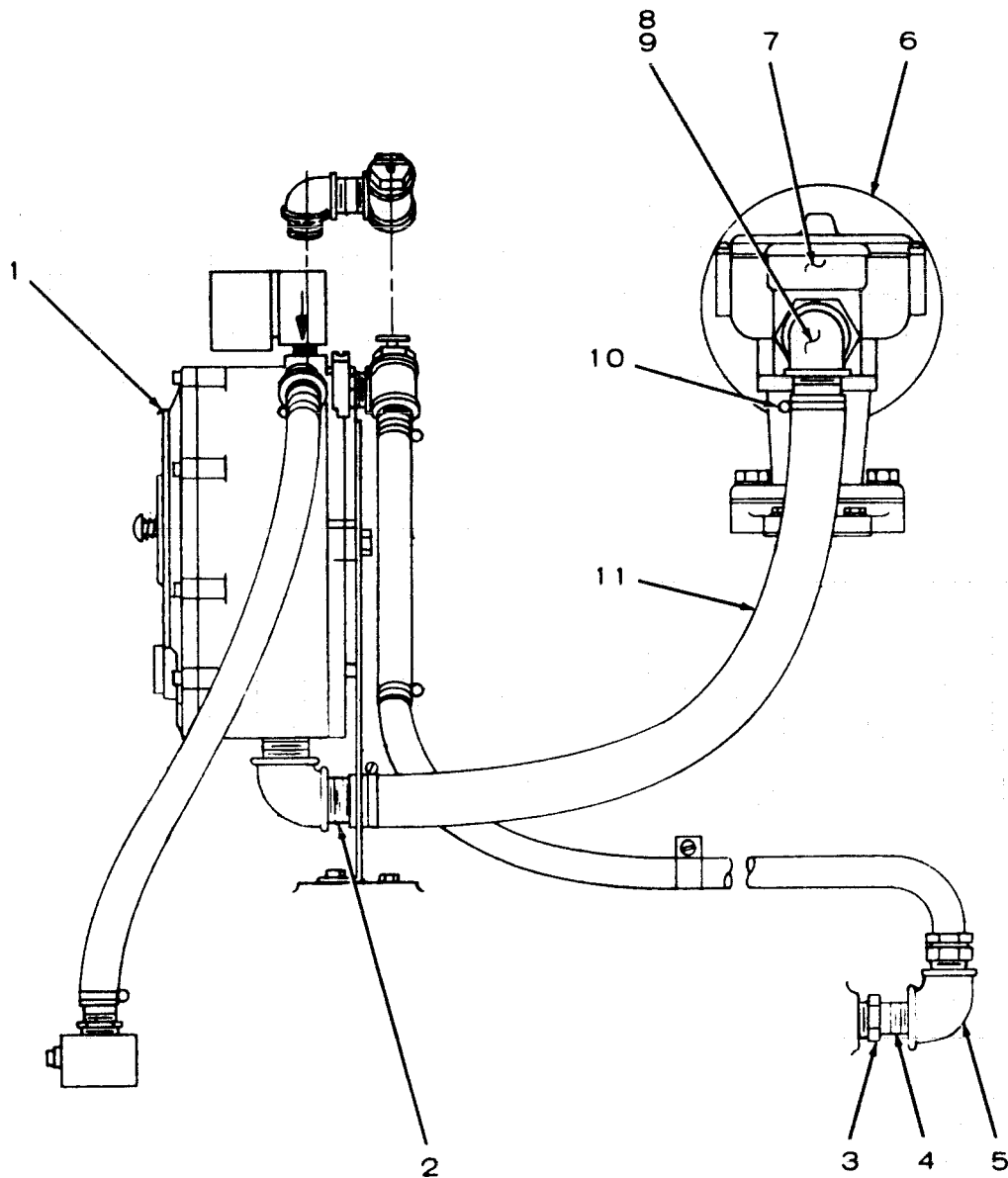
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1		1	Carburetor and Air Cleaner (See Separate Installation 179-0522 for Complete Breakdown of Components)	8	307-0837	1	Valve, Solenoid
2		1	Valve and Regulator (See Separate Installation 148-0832 for Complete Breakdown of Components)	9	505-0177	2	Nipple, Close
3	505-0004	2	Nipple, Close	10	505-0042	2	Elbow, Pipe
4	505-0023	1	Bushing, Reducer	11	307-0312	1	Valve, Magnetic
5	148-0627	1	Switch, Pressure	12	505-0102	1	Nipple, Close
6	505-0258	1	Nipple, Pipe	13	505-0129	1	Bushing, Reducer
7	331-0101	1	Hanger	14	148-0636	1	Valve, Pressure Reduction
				15	148-0620	1	Collar, Shaft
				16	191-0101	1	Strap, Generator Adjusting
				17	505-0249	1	Tee, Pipe
				18	505-0766	1	Bushing, Reducer
				19	505-0099	1	Nipple, Close

OPTIONAL LPG AND GASOLINE CARBURETOR INSTALLATION



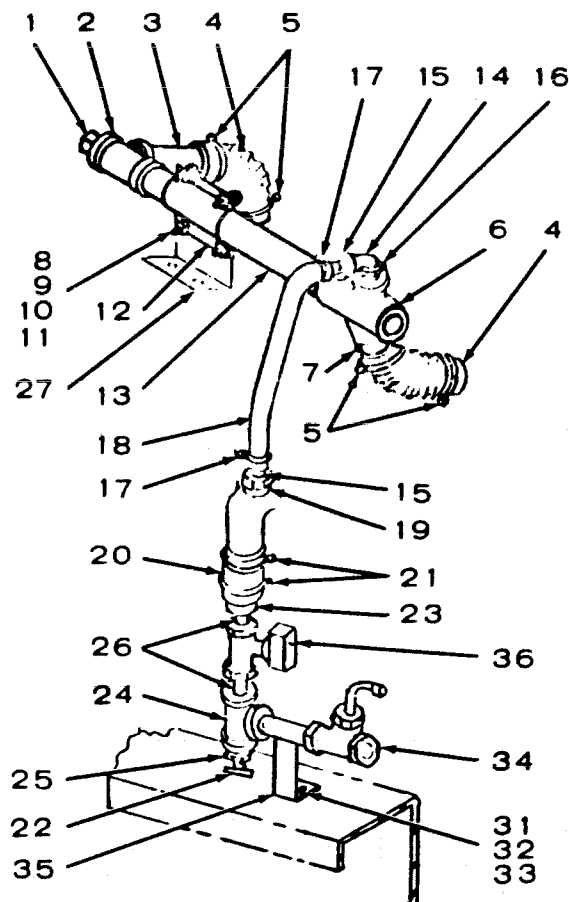
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1		1	Vaporizer Assembly (See Separate Installation 148-0833 for Complete Breakdown of Components)
2	505-0324	2	Nipple, Half
3	505-0071	1	Nipple, Pipe
4	505-0132	2	Elbow, Pipe
5	505-0021	1	Bushing, Reducer
6		1	Carburetor and Mixers (See Separate Installation 179-0520 for Complete Breakdown of Components)
7	505-0102	1	Nipple, Pipe
8	503-0382	2	Clamp, Hose
9	503-0792	1	Hose

OPTIONAL LPG LIQUID CARBURETOR INSTALLATION



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1		1	Vaporizer (See Separate Illustration 148-0833 for Complete Breakdown of Components)
2	505-0324	2	Nipple, Half
3	505-0021	1	Bushing, Reducer
4	505-0106	1	Nipple, Pipe
5	505-0040	1	Elbow, Pipe
6		1	Carburetor and Air Cleaner (See Separate Installation 179-0522 for Complete Breakdown of Components)
7	307-0312	1	Valve, Magnetic
8	505-0102	1	Nipple, Close
9	505-0132	1	Elbow
10	503-0382	2	Clamp, Hose
11	503-0792	1	Hose

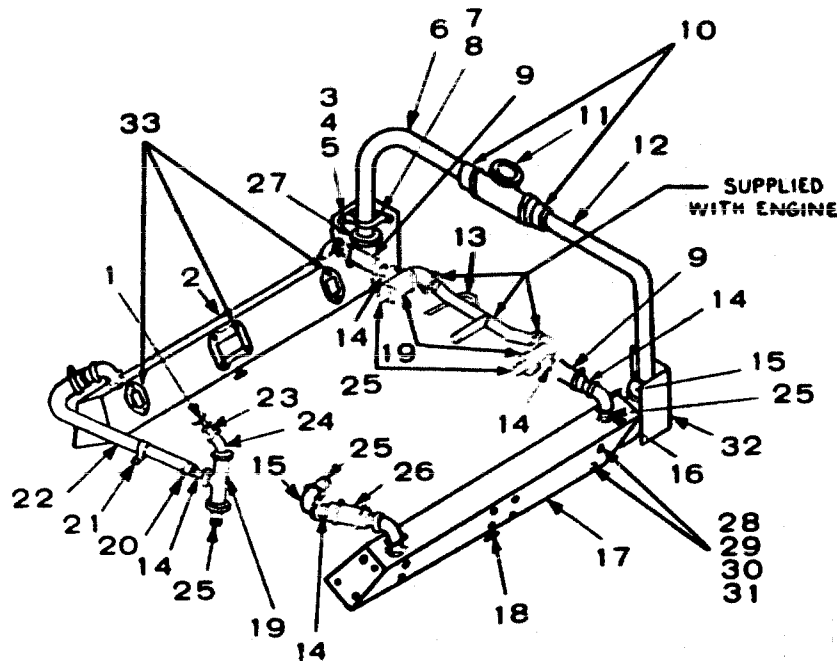
CITY WATER COOLED (HOUSED MODELS) INSTALLATION



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	505-0402	1	Plug, Square Head	19	505-0018	1	Bushing, Reducer (1/2 x 1/4")
2	505-0317	1	Tee, Pipe (1-1/2")	20		1	Hose, Order 3" of Bulk Hose #503-0357
3	505-0474	1	Nipple, Half (1-1/2 x 5")	21	503-0354	2	Clamp, Hose
4	503-0364	2	Hose, Radiator	22	504-0028	1	Cock, Drain
5	503-0365	4	Clamp, Hose	23	130-0452	1	Fitting, Water Inlet
6	505-0398	1	Tee, Side Outlet (1-1/2")	24	505-0166	1	Tee, Pipe (3/4")
7	505-0385	1	Nipple, Half (1-1/2 x 2")	25	505-0131	1	Bushing, Reducer (3/4 x 3/8")
8	800-0028	4	Screw, Cap - Hex Head (5/16-18 x 1")	26	505-0102	2	Nipple, Close (3/4")
9	862-0002	4	Nut, Hex (5/16-18")	27	130-0528	1	Support, Pipe
10	850-0045	4	Washer, Lock (5/16")	28	130-0828	1	Bracket, Support
11	526-0115	4	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)	29	505-0084	2	Nipple (3/4 x 2-1/2")
12	130-0488	1	Clamp, Pipe	30	505-0132	1	Elbow, 90° (3/4")
13	505-0424	1	Nipple, Pipe (1-1/2 x 16-1/2")	31	800-0023	2	Screw, Cap - Hex Head (1/4-20 x 1-3/8")
14	505-0011	1	Elbow, Street (1/4")	32	862-0001	2	Nut, Hex (1/4-20")
15	505-0010	2	Nipple, Half (1/4 x 1")	33	850-0040	2	Washer, Lock
16	505-0426	1	Bushing, Reducer (1-1/2 x 1/4")	34	504-0046	1	Valve, Globe
17	503-0032	2	Clamp, Hose	35	110-0810	1	Bracket & Nipple
18		1	Hose, Order 16-1/4" of Bulk Hose #503-0110	36	307-0835	1	Valve, Solenoid

WATER COOLED EXHAUST MANIFOLD (RADIATOR COOLED) INSTALLATION

NOTE: See separate group for early models. Can be identified by exhaust manifolds. This installation has ONAN cast into the manifolds

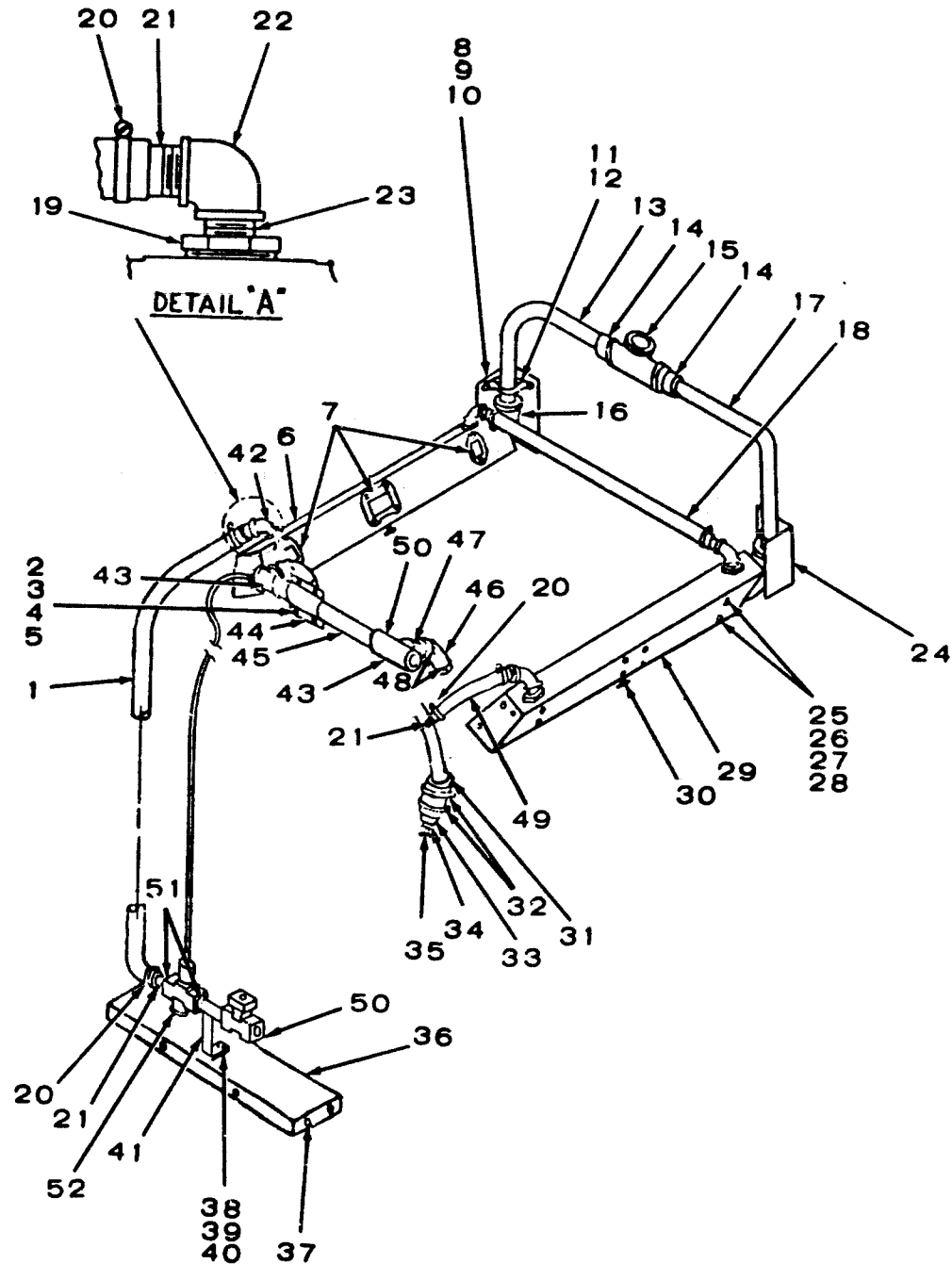


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	504-0028	1	Cock, Drain	20	503-0189	9	Clamp, Hose
2	154-1453	1	Manifold Assembly (LH)	21	148-0274	1	Clamp, Hose
3	870-0053	8	Nut, Hex (#10-32)	22		1	Hose, Order 30" of Bulk Hose #503-0191
4	813-0102	8	Screw, Machine - Roundhead (#10-32 x 5/8")	23	505-0019	1	Bushing, Reducer (1/2 x 3/8")
5	850-0030	8	Washer, Lock - Spring (#10)	24	505-0248	1	Elbow, Street (45° x 1/2")
6	155-1048	1	Tube, Exhaust Assembly	25	505-0100	8	Nipple, Close (1/2")
7	155-0661	2	Band, Shield Mounting	26	503-0191	1	Hose (13-1/2")
8	155-0660	2	Bracket, Exhaust Shield Mounting	27	505-0216	2	Elbow, Street (2-1/2")
9		2	Hose, Order 8" of Bulk Hose #503-0191	28	520-0110	8	Stud (3/8-24 x 4-1/2")
10	155-0615	1	Nipple, Exhaust Tube	29	520-0755	8	Stud (3/8-24 x 5-1/2")
11	505-0373	1	Tee, Reducing (2-1/2 x 2-1/2 x 3")	30	850-0050	16	Washer, Lock - Spring (3/8")
12	155-1047	1	Tube, Exhaust Assembly	31	104-0091	16	Nut, Hex (3/8-24")
13	130-0745	1	Water Line, Manifold Drain	32	155-0659	2	Shield, Exhaust Header
14	505-0185	8	Nipple, Half (1/2")	33	154-0592	2	Gasket Set, Manifold
15	505-0040	5	Elbow (1/2" x 90°)		800-0026	2	*Screw, Cap - Hex Head (5/16-18 x 3/4")
16	505-0399	4	Bushing, Reducer (1-1/2 x 1/2")				Coil Mounting
17	154-1452	1	Manifold Assembly (RH)		850-0045	2	*Washer, Lock - Spring (5/16")
18	504-0005	2	Cock, Drain				Coil Mounting
19	505-0108	3	Tee (1/2")		505-0185	1	*Nipple, Half (1/2" x 1-1/2")
					503-0191	6	*Hose, Rubber (3/4 x 1-1/8")

* - Not shown in Illustration.

CITY WATER COOLED WITH WATER COOLED EXHAUST AND MARSH REGULATOR (HOUSED AND UNHOUSED MODELS) INSTALLATION -

NOTE: See separate groups for early models. Can be identified
by exhaust manifolds. This installation has ONAN cast
on the manifolds.



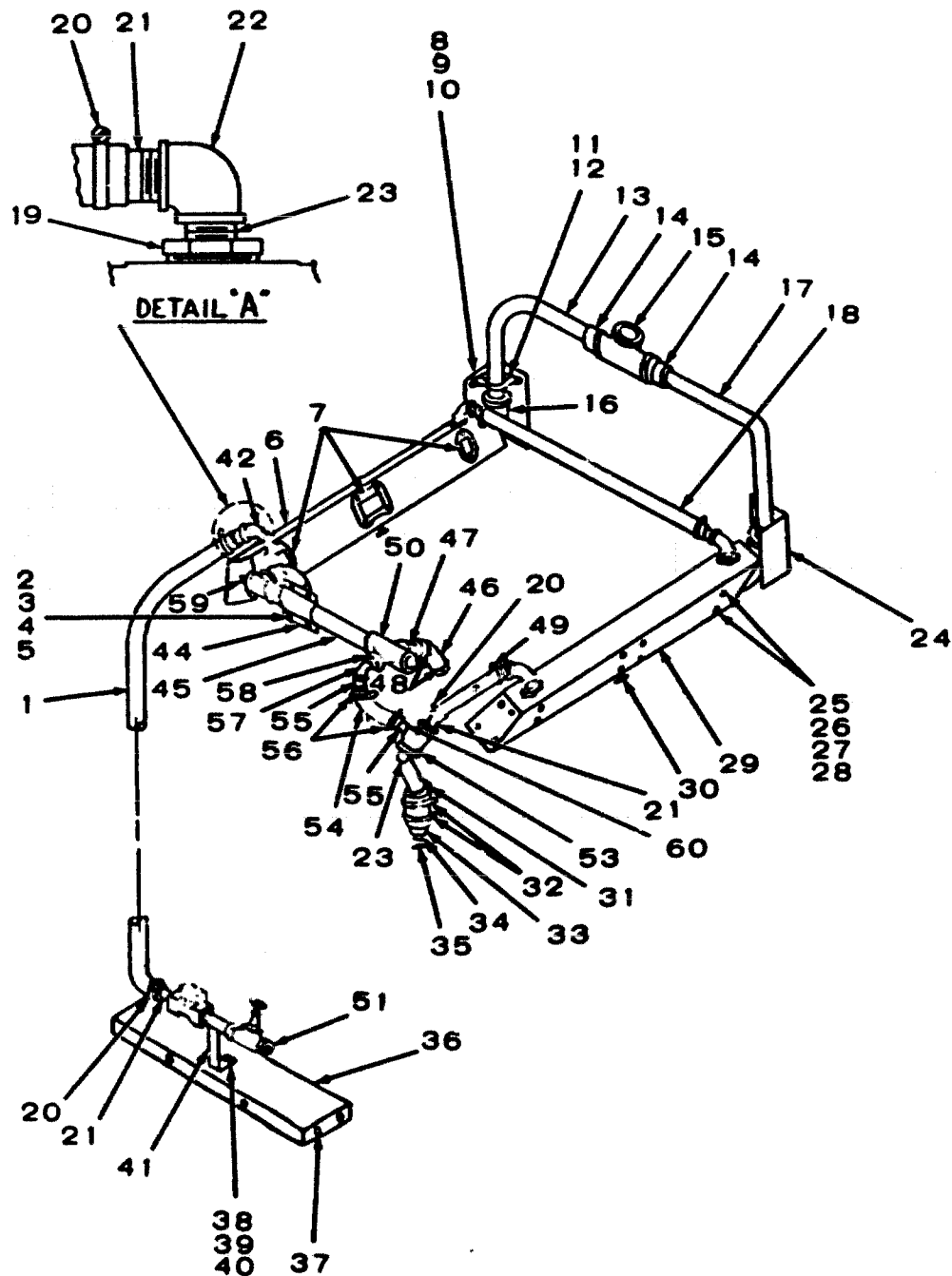
CITY WATER COOLED WITH WATER COOLED EXHAUST AND MARSH REGULATOR (HOUSED AND UNHOUSED MODELS) INSTALLATION -

NOTE: See separate groups for early models. Can be identified
by exhaust manifolds. This installation has ONAN cast
on the manifolds.

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1		1	Hose (Order 23" of Bulk Hose 503-0386)	28	104-0091	16	Nut, Hex (3/8-24)
2	800-0028	4	Screw, Cap - Hex Head (5/16-18 x 1")	29	154-1452	1	Manifold - R/H
3	526-0115	4	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)	30	504-0005	2	Cock, Drain
4	850-0045	4	Washer, Lock - Spring (5/16")	31		1	Hose (Order 3" of Bulk Hose 503-0357)
5	862-0002	4	Nut, Hex (5/16-18)	32	503-0354	2	Clamp, Hose
6	154-1453	1	Manifold - L/H	33	130-0452	1	Fitting, Water Inlet
7	154-0592	2	Gasket, Manifold	34	505-0131	1	Bushing, Reducer
8	813-0102	10	Screw, Cap - Hex Head (10-32 x 5/8")	35	504-0028	1	Cock, Drain
9	850-0030	10	Washer, Lock - Spring (#10)	36	130-0499	1	Bracket, Heat Exchanger
10	870-0053	8	Nut, Hex (#10-32)	37	821-0014	6	Screw, Cap - Locking Head (5/16-18 x 1/2")
11	155-0660	2	Bracket, Exhaust Shield	38	800-0007	2	Screw, Cap - Hex Head (1/4-20 x 1")
12	155-0661	2	Band, Shield Mounting	39	850-0040	2	Washer, Lock - Spring (1/4")
13	155-1048	1	Tube, Exhaust	40	862-0001	2	Nut, Hex (1/4-20)
14	155-0615	1	Nipple, Half	41	110-0526	1	Nipple and Bracket
15	505-0373	1	Tee, Reducer	42	505-0474	1	Nipple, Half
16	505-0216	2	Elbow, Street	43	505-0317	1	Tee
17	155-1047	1	Tube, Exhaust	44	130-0488	1	Support, Pipe
18		1	Hose (Order 38" of Bulk Hose 503-0386)	45	505-0424	1	Nipple
19	505-0399	4	Bushing, Reducer	46	503-0364	2	Hose
20	503-0189	6	Clamp, Hose	47	505-0272	1	Nipple, Half
21	505-0185	6	Nipple, Half	48	503-0365	4	Clamp, Hose
22	505-0040	4	Elbow	49		1	Hose (Order 11" of Bulk Hose 503-0386)
23	505-0100	5	Nipple, Close	50	307-0833	1	Valve, Solenoid
24	155-0659	2	Shield, Exhaust Header	51	505-0021	2	Bushing, Reducer
25	520-0755	8	Stud (3/8-24 x 5-3/4")	52	309-0241	1	Valve, Water Temperature Control
26	520-0110	8	Stud (3/8-24 x 4-1/2")		800-0025	2	Screw, Cap - Hex Head - Coil Mounting (5/16-18 x 3/4")
27	850-0050	16	Washer, Lock - Spring (3/8")				

CITY WATER COOLED WITH WATER COOLED EXHAUST MANIFOLD (HOUSED AND UNHOUSED MODELS) INSTALLATION

NOTE: See separate groups for early models. Can be identified by exhaust manifolds. This installation has ONAN cast into the manifold.



CITY WATER COOLED WITH WATER COOLED EXHAUST MANIFOLD (HOUSED AND UNHOUSED MODELS) INSTALLATION

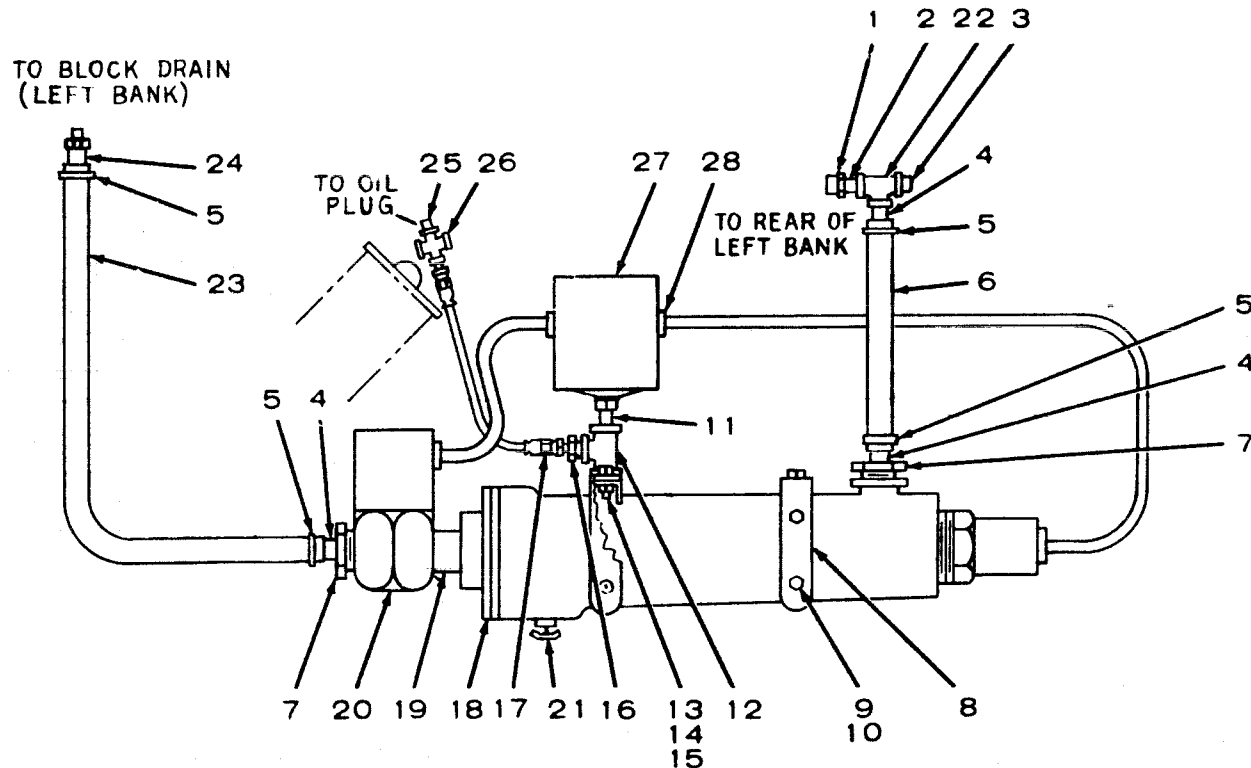
NOTE: See separate groups for early models. Can be identified by exhaust manifolds. This installation has ONAN cast into the manifold.

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1		1	Hose (Order 23" of Bulk Hose 503-0386)
2	800-0028	4	Screw, Cap - Hex Head (5/16-18 x 1")
3	526-0115	4	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)
4	850-0045	4	Washer, Lock - Spring (5/16")
5	862-0002	4	Nut, Hex (5/16-18)
6	154-1453	1	Manifold - L/H
7	154-0592	2	Gasket, Manifold
8	813-0102	10	Screw, Cap - Hex Head (10-32 x 5/8")
9	850-0030	10	Washer, Lock - Spring (#10)
10	870-0053	8	Nut, Hex (#10-32)
11	155-0660	2	Bracket, Exhaust Shield
12	155-0661	2	Band, Shield Mounting
13	155-1048	1	Tube, Exhaust
14	155-0615	1	Nipple, Half
15	505-0373	1	Tee, Reducer
16	505-0216	2	Elbow, Street
17	155-1047	1	Tube, Exhaust
18		1	Hose (Order 38" of Bulk Hose 503-0386)
19	505-0399	4	Bushing, Reducer
20	503-0189	6	Clamp, Hose
21	505-0185	6	Nipple, Half
22	505-0040	4	Elbow
23	505-0100	5	Nipple, Close
24	155-0659	2	Shield, Exhaust Header
25	520-0755	8	Stud (3/8-24 x 5-3/4")
26	520-0110	8	Stud (3/8-24 x 4-1/2")
27	850-0050	16	Washer, Lock - Spring (3/8")
28	104-0091	16	Nut, Hex (3/8-24)
29	154-1452	1	Manifold - R/H
30	504-0005	2	Cock, Drain
31		1	Hose (Order 3" of Bulk Hose 503-0357)
32	503-0354	2	Clamp, Hose
33	130-0452	1	Fitting, Water Inlet

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
34	505-0131	1	Bushing, Reducer
35	504-0028	1	Cock, Drain
36	130-0499	1	Bracket, Heat Exchanger
37	821-0014	6	Screw, Cap - Locking Head (5/16-18 x 1/2")
38	800-0007	2	Screw, Cap - Hex Head (1/4-20 x 1")
39	850-0040	2	Washer, Lock - Spring (1/4")
40	862-0001	2	Nut, Hex (1/4-20)
41	110-0526	1	Nipple and Bracket
42	505-0474	1	Nipple, Half
43	505-0317	1	Tee
44	130-0488	1	Support, Pipe
45	505-0424	1	Nipple
46	503-0364	2	Hose
47	505-0272	1	Nipple, Half
48	503-0365	4	Clamp, Hose
49		1	Hose (Order 11" of Bulk Hose 503-0386)
50	505-0398	1	Tee, Side Outlet
51	504-0019	1	Valve, Lockshield
52	505-0108	1	Tee
53		1	Hose (Order 9" of Bulk Hose 503-0110)
54	505-0010	2	Nipple, Half
55	503-0032	2	Clamp, Hose
56	505-0011	1	Elbow, Street
57	505-0426	1	Bushing, Reducer
58	505-0402	1	Plug
59	505-0018	1	Bushing, Reducer
	130-0454	1	*Guard, Belt
	130-0455	1	*Bracket, Guard Mounting
	800-0026	2	*Screw, Cap - Hex Head - Oil Mounting (5/16-18 x 3/4")
	821-0004	2	*Screw, Cap - Locking Head (#10-32 x 5/16")

* - Parts Not Shown in Illustration.

OPTIONAL WATER JACKET HEATER INSTALLATION



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	505-0019	1	Bushing, Reducer
2	505-0101	1	Nipple, Close
3	505-0110	1	Plug, Square Head
4	505-0135	3	Nipple, Half
5	503-0183	4	Clamp, Hose
6	503-0387	1	Hose
7	505-0455	2	Bushing, Reducer
8	130-1192	2	Bracket, Heater Mounting
9	821-0016	4	Screw, Cap - Self Locking (5/16-18 x 3/4")
10	870-0257	4	Nut, Hex - Self Locking (5/16-18)
11	505-0009	1	Nipple, Close
12	333-0142	1	Support, Pressure Switch
13	800-0007	4	Screw, Cap - Hex Head (1/4-20 x 1")
14	850-0040	4	Washer, Lock - Spring (1/4")
15	862-0001	4	Nut, Hex (1/4-20)
16	505-0007	1	Bushing, Reducer
17	501-0227	1	Line, Flexible
18	333-0156	1	Heater, Engine (2000 Watt)
19	505-0004	1	Nipple, Close
20	309-0304	1	Switch, Thermostat
21	504-0003	1	Cock, Drain
22	505-0060	1	Tee, Pipe
23	503-0565	1	Hose
24	502-0613	1	Connector, Hose
25	505-0104	1	Nipple, Short
26	505-0763	1	Cross, Pipe
27	309-0307	1	Switch, Oil Pressure
28	331-0027	2	Connector - Romex
	323-0957	2	Connector, Wire Nut (Not Illustrated)
	332-0149	2	Terminal (Not Illustrated)

**SPECIAL PARTS LIST
FOR KR SERIES PENNSYLVANIA APPROVED
GENERATING MODELS**

Refer first to this list for Pennsylvania Approved Models. Parts not in this list refer to the main parts list. When referring to the main parts list, reference to Spec letter or voltage also applies to these models.

These models are recognized by the numbers 30 (Gasoline Fuel), 31 (Gaseous Fuel), or 131 (Liquid Petroleum Fuel) appearing in the model. These numbers may appear just before or after the diagonal line (/). The number appearing after the diagonal line signifies a standard Pennsylvania Approved model.

REPLACEMENT ENGINE

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	100-0870	1	International Harvester Co. Model UV-549
	100-0855	1	International Harvester Co. Model UV-549-LPG Fuel Only

NOTE: See Standard parts list for general description.

**CONTROL GROUP
(ENGINE INSTRUMENTS PORTION)**

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
18	300-0730	1	Monitor, Engine Control (See Separate Group for Components)

CONTROL GROUP (AC OUTPUT PORTION)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	320-0307	1	Lock, Circuit Breaker Handle